Parametric Monitoring
Related Issues

Title V Workgroup 4
November 8, 2011
Title V Workgroup 4 – Issue #1

Problem

Parametric monitoring ranges not always present in the operation permit.
Title V Workgroup 4 – Issue #1 Final Proposal

- Parametric monitoring ranges (PMR) will be placed in the operation permit.
- The Department will not place PMR in future Title I permits, unless requested by the applicant.
- At the request of the permittee, existing Title I-derived PMR language will be replaced using Title I procedures with alternate language. The authority to have a PMR range will stay in the Title I, while the actual range will be an operation permit condition.
Title V Workgroup 4 – Issue #2
Problem

No justification may be present in the operation permit preliminary determination linking parametric monitoring ranges to compliance with applicable requirements.
Title V Workgroup 4 – Issue #2
Final Proposal

- The permittee will provide written justification of the parametric monitoring range (PMR).
- Justification Submittal Schedule
  - Operation Permits – existing sources
    - Revision (for sources affected by the revision)
    - Renewal (all other sources)
    - At the request of the Department
  - Construction Permits
    - New or Modified Sources – new PMR
      - To complete the operation permit application
    - Modified Source – no PMR change
      - With construction permit application
Title V Workgroup 4 – Issue #3

Problem

The parametric monitoring frequency may not match the time period of the applicable requirement.
Title V Workgroup 4 – Issue #3
Discussion

• Should parametric monitoring match the frequency of the relevant time period?
  • One piece of the overall compliance demonstration requirements.
  • Parametric monitoring is a reflection of the proper operation of the control device or other equipment.
  • Operation within the range offers a reasonable assurance of compliance.
  • Does a one-size-fits-all approach for monitoring parameters and frequencies make sense?
Title V Workgroup 4 – Issue #3
Discussion

• EPA using petition responses to give guidance to states.
• Xcel Energy – Colorado – Region 8
  • Xcel Energy, Hayden Station - 2009
  • Xcel Energy, Pawnee Station - 2010
  • Xcel Energy, Cherokee Station - 2010
  • Xcel Energy, Valmont Power Plant - 2010
Title V Workgroup 4 – Issue #3

Discussion

- Petitioner claims regarding Xcel permits
  - Title V permit does not require actual monitoring of PM emissions
    - PM emission limit of 0.1 lb/MMBtu - SIP limit
    - Facility used COMS to monitor PM
  - Stack testing is too infrequent, even if it could demonstrate compliance
    - Varies between annually to every 5 years
  - Cannot rely on CAM to meet Title V monitoring requirements
    - Contends no relationship supported between opacity and PM in the permit
Title V Workgroup 4 – Issue #3 Discussion

- EPA Petition Response – “Three Prong Approach” is acceptable for assuring compliance
  - Performance testing to demonstrate that the specified limit is being met.
  - Operation and maintenance of the control device to ensure that it continues to operate properly.
  - CAM plan to provide a mechanism for assessing the performance of the control device on an ongoing basis.
Final Proposal

• Title V Source – PSEU subject to CAM
  • Compliance testing (minimum once every 5 years)
  • Operation and maintenance requirements
  • CAM

• Title V Source – PSEU not subject to CAM
  • Initial test; Requirement to use control device;
  • Operation and maintenance requirements
  • CAM-like justification of monitoring parameters and frequency (CAM-lite)
Title V Workgroup 4 – Issue #3
Final Proposal

- **Minor Sources**
  - Initial test; Requirement to use control device
  - Operation and maintenance requirements
  - Ch. NR 439.055 monitoring (minimum)
Title V Workgroup 4 – Issue #3

Issues

- Title V CAM-lite justification would address:
  - The applicability of existing monitoring equipment and procedures.
  - The ability of the monitoring to account for process and control device operational variability.
  - The level of actual emissions relative to the compliance limitations.
- Should industry or trade groups develop presumptive CAMs?
- Should the Department provide approved presumptive CAMs similar to the printing TSD document?
- CAM attached to the permit vs. CAM incorporated into the permit.