

Emissions Measurement and Monitoring Projects

Update

Robin Segall

Office of Air Quality Planning and Standards
US Environmental Protection Agency

Measurement Technology Workshop
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Organizational overview

- Measurement Technology Group
 - Air Quality Assessment Division
 - Evaluate new and revise existing test methods and CEMS performance specifications, approve alternatives
 - Conniesue Oldham - Group leader
- Measurement Policy Group
 - Sector Policies and Programs Division
 - Coordinate with rule writers on source monitoring and data management
 - Maintain EF program and RACT/BACT/LAER
 - Bob Schell – Group leader



New and revised parts 51, 60, and 63 test methods

- Presentations have covered:
 - Methods 3A, 6C, 7E, 10, and 20 (instrumental test methods) revisions and corrections
 - Methods 202 and 201A (fine PM) updates
 - Methods 30A and 30B (Hg) rulemaking
- Method 18 – Gaseous organics by GC
 - Revisions to:
 - Clarify QA/QC requirements
 - Address water soluble organics
 - Will propose in late 2007/early 2008
 - Contacts: Gary McAlister, Rima Howell, MTG



New and revised parts 51, 60, and 63 test methods

- ❑ Method 301 – Emissions data validation procedures
 - Revisions proposed 12/04
 - Extensive comments
 - Expect promulgation in late 2007
 - Contact: Gary McAlister, MTG
- ❑ Methods 203A, B, and C - Variations on Method 9 for SIPs
 - Alternate averaging time calculations
 - Promulgated 9/21/2006
 - Contact: Robin Segall, MTG



New and revised parts 51, 60, and 63 test methods

- ❑ Method 207 – VOC from corn wet milling operations
 - Pre-survey procedure for compounds and sampling approach (M18, M308, NCASI CI/SG/PULP-94.03)
 - Available as OTM-11 on EMC website
 - To be proposed in late 2007
 - Contact: Gary McAlister, MTG
- ❑ Method 208 – VOC from hot mix asphalt plant dryers
 - Protocol for collecting, analyzing, and reporting data
 - Procedure based on Method 25A (FIA), available as OTM-12 on EMC website
 - To be proposed in late 2007
 - Contact: Gary McAlister, MTG



Alternative methods

- Broadly applicable alternative methods approvals
 - FR notice – 01/30/07
 - Announces plan to publish alternative method approvals for broad applications rather than just site-specific approvals
 - GD-022 – process for obtaining approval
 - Contact: Robin Segall, MTG



Alternative and other methods

- Digital camera for visible emissions opacity measurement - PRE-008 on EMC website
 - Currently in development in ASTM committee, potential alternative to Method 9
 - Contact: Tom Logan, MTG



Alternative and other methods

- Optical remote sensing (ORS) for fugitive gases - OTM-10 on EMC website
 - Path-integrated ORS technology (FTIR, UV-DOAS, TDLAS, PI-DIAL)
 - Peer-reviewed and potential alternative method
 - Contact: Robin Segall, MTG



Alternative and other methods

- ❑ Portable methods for periodic monitoring – OTM-13 on EMC website
 - For O₂, CO, and NO_x
 - Design and performance criteria
 - Contact: Foston Curtis, MTG
- ❑ Isocyanate sampling and analysis – OTM-14 on EPA website
 - Proposed as Method 207 in 1997
 - No plans to promulgate, but method available for use as needed
 - Contact: Gary McAlister, MTG



Improving emissions monitoring through rulemaking

- Performance Specification 16
 - Predictive emissions monitoring systems (e.g., NO_x from combustion sources)
 - Proposed August 2005
 - Prepared response to comments document
 - Promulgate in late 2007
 - Contact: Foston Curtis, MTG



Improving emissions monitoring through rulemaking

- Performance Specification 17 – verifying operation of continuous parameters monitoring systems
 - To be used with MACT rules with process operating limits
 - For T, ΔP , pH, Q_{liq} , conductivity
 - Drafts developed with stakeholder input
 - Proposal planned later in 2007
 - Contact: Barrett Parker, MPG



Improving emissions monitoring through rulemaking

- PM_{fine} Implementation rule
 - Method 202 and other fine PM method work that Ron Myers discussed
 - Guidance to States on setting representative emissions limits - anticipated after rule issued
 - Contact: Tom Driscoll, MPG



Tools for improved monitoring and testing

□ Monitoring knowledge base

- Interactive compilation of information linking monitoring and control device technologies on TTN/CHIEF website
- Expansion from current version and links with RACT/BACT/LAER expected in 2007
- Contact: Barrett Parker, MPG



Tools for improved monitoring and testing

- Fugitive VOC and dust monitoring
 - Collaboration with mining and petroleum industry on monitoring technologies and revised EFs
 - 2006 workshop on VOC reviewed IR camera, differential absorption light detection and ranging (DIAL) spectroscopy, and radial-plume mapping spectroscopy (report on TTN/CHIEF)
 - 2007 VOC workshop being planned
 - Contact: John Bosch, MPG

