

2014 MTG HIGHLIGHTS

Kim Garnett

Measurement Technology Workshop January 27, 2015

Test Method Update Rulemaking

- Revisions to over 50 Test Methods & PS
 - Published February 27, 2014 (79 FR 11228)
- Have begun work on next revisions package
 - Corrections/clarifications
 - Shooting for proposal in Summer of 2015
- Contact: Lula Melton



Test Methods

■ Method 2H Revisions

- Proposed on August 25, 2009 (74 FR 42819)
- Incorporated the improvements from CTM-041
 - Assessment of Wall Effects in Rectangular Ducts or Stacks
- Comments received on proposal
- Promulgation expected in late 2015
- □ Contact: Jason DeWees



Test Methods

- Methods 201A and 202 Revisions
 - Latest version promulgated in 2010 (74 FR 12970)
 - Some clarifications included in Test Method Update Package
 - New project to evaluate and propose minor changes
 - Conducted Stakeholder meetings
 - Upcoming Method 202 best practices document for measuring low concentration CPM
 - Contact: Ray Merrill, Jason DeWees

Test Methods

- Methods 325A&B PassiveFenceline Monitoring
 - Fugitive/area source emission concentrations
 - Proposed June 30, 2014 (79 FR 36879)
 - Contacts: Ray Merrill, Jason DeWees





CEMS Performance Specifications

- Performance Specification 11 Revisions and Guidance
 - Latest version promulgated in 2009 (74 FR 12575)
 - Minor issues corrected in Test Method Update Package
 - Currently evaluating a number of potential changes
 - Dependent on available resources
 - Contact: Kim Garnett

CEMS Performance Specifications

- □ PS -18 along with Procedure 6 for HCI CEMS
 - To support Portland Cement MACT and MATS Rule
 - Proposed May 14, 2014
 - Technology neutral
 - For measurement range of 0-5 ppm HCl
 - □ Hope to finalize in early 2015
 - Contact: Ray Merrill, Candace Sorrell



QA Procedures for CEMS

- □ Procedure 3 QA for COMS
 - □ Final version published 5/16/14
 - 79 FR 2849
 - Establishes QA/QC procedures for COMS
 - Contact: Lula Melton, Solomon Ricks





Broadly Applicable Alternative Test Methods

- What are they?
- □ Latest FR Notice February 15, 2012
- Preparing notice for 2014
 - Contact: Lula Melton
- □ Approvals for 2014
 - Alternative Calibration Gases for Bulk Terminals
 - Alternative VOC Measurement for Engines
 - Alternative Minimum Sample Volume for Gold Mines

Other Test Methods or OTMs

- Not been subject to rulemaking process
- Found to be potentially useful
- Information provided
 - Field and lab validation studies
 - Peer review comments
 - QA/QC procedures
- Consider for use in federally enforceable programs
- Candidates for alternative test methods
- Encourage submission of an additional data or comments

Other Test Methods or OTMs

- OTM 33: Geospatial Measurement of Air Pollution,
 Remote Emissions Quantification
- OTM 33A: Geospatial Measurement of Air Pollution,
 Remote Emissions Quantification, Direct Assessment
- OTM 34: Method to Quantify Road Dust Particulate
 Matter Emissions (PM10 and/or PM2.5) from Vehicular
 Travel on Paved and Unpaved Roads
- OTM 35: Measurement of Particulate Matter and Other Heavy Metal Emissions from Electric Arc Welding Processes

- Optical Gas Imaging (OGI)
 - Assess the technical underpinnings needed
 - Quantitatively determine the detection capabilities
 - Parameters of interest
 - Background vs. gas temperature
 - Homogeniety of thermal background
 - Effects of wind spped, relative humidity, gas composition
 - Contact: Jason DeWees

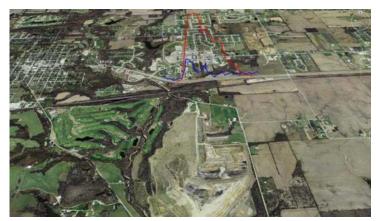


- PM 2.5 Method Development for Wet Stacks
 - CEM method Baldwin Environmental
 - Initial testing results were encouraging
 - More modeling of the IDS
 - Possible field test
 - Manual method Air Control Techniques
 - Completed Method 301 testing
 - Additional testing to determine cut size
 - Contacts: Kim Garnett, Jason Dewees

- Upstream Oil & Gas Emission Measurement
 - Working with EPA/ORD on approaches to quantify VOC, HAP and GHG emissions from upstream oil & gas operations
 - Allows for drive-by measurement of potential sources
 - Posted OTM 33 & 33A describing methodology in 2014
 - Supplemental information also available
 - Contacts: Jason DeWees, Eben Thoma (ORD), Robin Segall



- Large Area Source Remote Measurement
 - Large area sources (e.g., landfills) exceed optical path lengths of current technologies; two new approaches
 - Addendum to OTM-010 uses an estimated "fetch" is used to determine how much area would contribute to the flux measured
 - Described in conference paper and plan to publish
 - Release of known amount of tracer coupled w/ downwind measurement of tracer and target pollutant; emissions calculated from ratio
 - Analyze additional tracer gas data and publish protocol in 2015
 - Contacts: Jason DeWees,Eben Thoma



- Handbook for Measurement of GHGs
 - Methodologies for measuring GHGs from point & nonpoint sources
 - \square CO₂, CH4, N₂O, SF₆, FC, NF₃
 - Presently undergoing internal review
 - □ Final expected sometime in 2015
 - When complete will be posted on the EMC website
 - Contact: Dennis Mikel



- Nanoparticle/Ultrafine Particles Handbook
 - Current capabilities of measuring or sensing Nanoparticles (NP), nanomaterials (NM), and gas sensors
 - Raise awareness and build knowledge base of the nanoscale sensing technologies
 - A resource for federal, state and local agencies
 - Expected to be available in 2015
 - When complete will be posted on the EMC website
 - Contact: Dennis Mikel

- Stationary Source Audit Program (SSAP)
 - Promulgated 8/13/2010 (75 FR 28 55636)
- EMC QA Conference Call
 - Now used as a forum for testing and monitoring issues
 - □ First Monday of every month at 1:30-3:00 pm (EST)
 - Contact: Candace Sorrell

Questions?



