Implementing the 2006 Revisions to the Ambient Monitoring Regulations

Updates for AQS Conference Participants

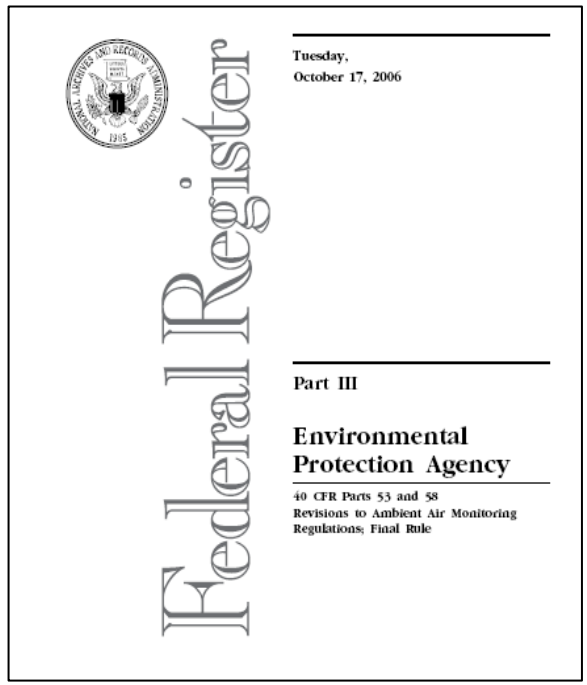
Monitoring Rule Revisions at the 50,000' Level

- PM NAAQS
  - New/updated Federal reference methods and Federal equivalent method approval procedures
  - Approved Regional Method for $PM_{2.5}$
  - Daily sampling frequency for some $PM_{2.5}$ FRM's
- National Monitoring Strategy
  - Reduced or eliminated minimum network requirements for some criteria pollutants
  - New NCore network requirements
  - Quality assurance program refinements
- Clarification of special purpose monitor provisions
- Accelerated data certification schedule
- Public inspection requirement for annual monitoring network plans
- New 5-year network assessment requirements

For more detail:
Presentations from the 2006 National Monitoring Conference

http://www.epa.gov/ttn/amtic/2006present.html

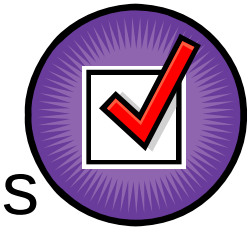
Key Rule Deadlines



Effective in 60 Days from Federal Register Printing - (December 18, 2006)

- New criteria for approval of Federal Equivalent Methods for $PM_{2.5}$ and $PM_{10-2.5}$, and Approved Regional Methods
- New QA requirements for SLAMS
- New required numbers of $PM_{2.5}$, PM_{10}, Pb, and ozone monitors by MSA, if lower than old
- Removal of required numbers for CO, SO_2, and NO_2 (except if in SIP)
- Criteria for removal of monitors above required number
- Conditions on use of SPM data
- Removal of required reporting of certain $PM_{2.5}$ monitoring parameters
- $PM_{10-2.5}$ probe heights
- Increased distance between roadways and NEW ozone monitors

Effective January 1, 2007



- Every day $PM_{2.5}$ samples at about 50 stations reading close to the new 24-hour standard
- Retention of low-volume PM_{10} and $PM_{10-2.5}$ filters in addition to $PM_{2.5}$
- Reporting of $PM_{2.5}$ field blank filter mass data to AQS
  - http://www.epa.gov/ttn/airs/airsaqs/faq/aqsfaq_loadingdata_files/PM2.5%20Blanks.pdf
  - A few questions but reporting is proceeding OK (several thousand records available for 2007 data so far)
  - 1st quarter 2007 field blank mass data as of early June, median value = 3 µg (max = 183, min = -106)

Effective July 1, 2007

- Precision and accuracy data for Q1 of 2007 must be submitted to AQS
  - Not an explicit requirement in old rule, not all monitoring organizations have been reporting it
- Annual monitoring plan
  - Describe your SLAMS and SPM stations
  - Propose changes for R.A. approval that are anticipated up to 18 months in the future. R.A. can take 120 days to approve
  - Must make plan available to public for 30 days prior to giving to EPA. Inviting public comments at this stage will save EPA doing so later
  - Strategy – Use this as opportunity to clean up the network documentation, and as a public information resource
    - For example, recheck geographic coordinates with GPS, revise/insert other site and monitor descriptions in AQS. We really use this stuff!

Effective September 10, 2007
Direct Final Rule to Correct and Clarify Monitoring Rule

- What is being corrected?
  - Print errors in tables, figures, and equations mainly in Part 53 rule text. A few errors occurred in Part 58 as well.
  - Few miscellaneous corrections
- What is being clarified?
  - Operating schedule rule text (58.12)
  - A few preamble statements that were inconsistent with rule text
  - Missing PM_{10} network design (Appendix D) rule text restored
  - Other rule text revisions for clarity (e.g., use of local standard time)
- What is being added?
  - Proposed R.A. authority to deviate from PM10 minimum monitoring requirements
- Rule timetable
  - Published in Federal Register June 12, 2007 (72 FR 32193)
  - Public comment period ends July 12, 2007 (72 FR 32266) but please contact Lewis Weinstock directly with your questions so we don't have to withdraw provisions and re-propose

Effective January 1, 2008

- Start operation of any new required $PM_{2.5}$, PM_{10}, or ozone monitors.
  - About 13 new $PM_{2.5}$ monitors.
  - Few additional ozone monitors.
  - PM_{10} monitors in approximately 8 MSAs.
    - R.A. would be able to waive PM10 requirement if no comments received on applicable DFR provision.

Effective January 1, 2009

- New QA requirements apply to Special Purpose Monitoring stations using FRM, FEM, or ARM monitors.
  - Regional Administrator can approve an alternative for practicality reasons, if full QA not essential to monitoring objective.
  - Alternative QA plan means data not comparable to the NAAQS.

Effective July 1, 2009

- Plan for required NCore stations.

Effective May 1, 2010

- Revised deadline for annual certification of data (CY 2009) submitted to AQS.

Effective July 1, 2010

- First 5-year network assessment.

Effective January 1, 2011

- Operation of NCore stations.

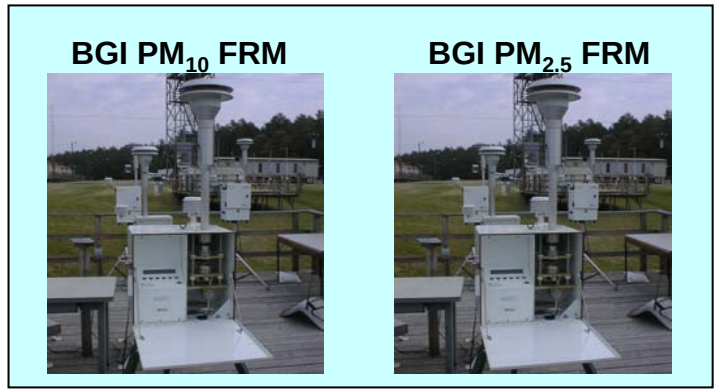
PM Methods

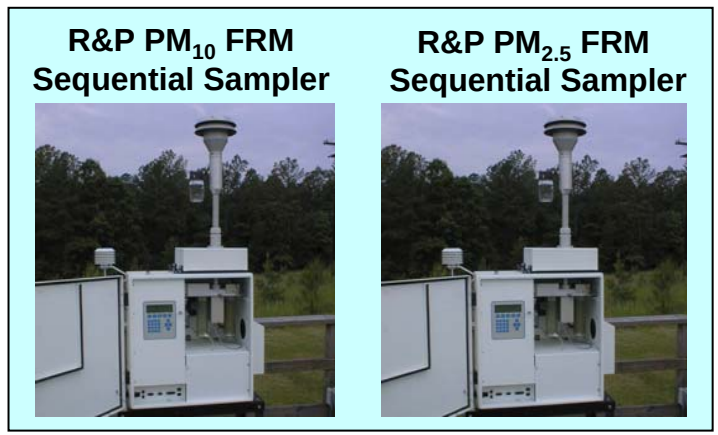
PM_{10} Monitors

- What's new:
  - Basically nothing – old rule language and requirements retained
  - Regional Administrator authority to waive minimum requirements (consistent with PM2.5 and ozone) included in Direct Final Rule
- For your consideration:
  - Revisit your monitoring objectives
  - Discontinue low value sites even though marginal savings may not be large in the short term. Give priority to urban/industrial areas with high concentrations.
  - Replace high volume samplers with low volume samplers to reduce uncertainty and support PM10-2.5 measurements.
  - Document in your upcoming and future annual monitoring network plans

Coarse Particles: $PM_{10-2.5}$

- What's new (no NAAQS but):
  - $PM_{10-2.5}$ FRM
  - Criteria for approval of reference or equivalent methods
  - NCore monitoring requirement for mass and speciation (1-in-3 day)
- For your consideration:
  - Pairing existing low-volume PM_{10} samplers with $PM_{2.5}$ FRM = $PM_{10-2.5}$ FRM
  - Reporting data to AQS to support coarse particle studies
  - Transition excess $PM_{2.5}$ samplers to paired $PM_{10-2.5}$ FRM's if opportunity occurs, particularly in areas with high levels of coarse
- Improved monitoring data is needed to support the next round of PM NAAQS reviews that will conclude in 2011





Reporting $PM_{10-2.5}$ to AQS

- New parameter code available – 86502
- Must report the $PM_{2.5}$ concentration (88101) and the difference (PM_{10}-$PM_{2.5}$) concentration. The low volume PM_{10} concentration (at local conditions) is desired but not required.
  - Report negatives if you get them when the individual filters are validated. Will help to track method performance.
- Method codes set up on most likely sampler pairings.
  - Not FRM's yet until vendors apply for designations and those are approved.

Parameter Code	Parameter Desc	Methodology Code	Sample Coll Desc	Sample Analysis Desc
86502	Acceptable PM10-2.5 - Local Conditions	116	BGI MODEL PQ200 PM2.5 SAMPLER w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	117	R & P MODEL 2000 PM2.5 SAMPLER w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	118	R & P MODEL 2025 PM2.5 SEQUENTIAL w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	119	ANDERSEN RAAS2.5-100 PM2.5 SAM w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	120	ANDERSEN RAAS2.5-300 PM2.5 SEQ w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	123	THERMO ENV MODEL 605 CAPS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	128	Andersen RAAS2.5-2000PM2.5 Aud w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	129	R & P COMODEL 2000 PM-2.5 AUDIT w/WINS	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	135	URG-MASS100 SINGLE PM2.5 SAMPLER	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	136	URG-MASS300 SEQUENTIAL PM2.5 SAMPLER	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	142	BGI Models PQ200-VSCC or PQ200A-VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	143	R & P Model 2000 PM-2.5 Air Sampler w/VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	144	R & P Model 2000 PM-2.5 Audit Sampler w/VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	145	R & P Model 2025 PM-2.5 Sequential Air Sampler w/VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	153	Thermo Electron Model RAAS2.5-100 w/VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	154	Thermo Electron Model RAAS2.5-200 Audit w/VSCC	Paired-Gravimetric-Difference
86502	Acceptable PM10-2.5 - Local Conditions	155	Thermo Electron Model RAAS2.5-300 Sequential w/VSCC	Paired-Gravimetric-Difference

Fine Particles: $PM_{2.5}$

- What's new:
  - Slight changes to FRM based on already approved procedures
  - Criteria for approval of reference and equivalent methods
  - Approved Regional Method process (dialogue with monitoring staff to see if an ARM application is being considered)
  - Minimum monitoring requirements based on MSA population and design value
    - Still have background and transport site requirements
  - Daily operating schedules for design value monitors within 5% of 24-hour NAAQS
  - Continuous monitoring requirement (does not have to be FEM or ARM) – one half of required monitors
  - Field blank mass reported to AQS

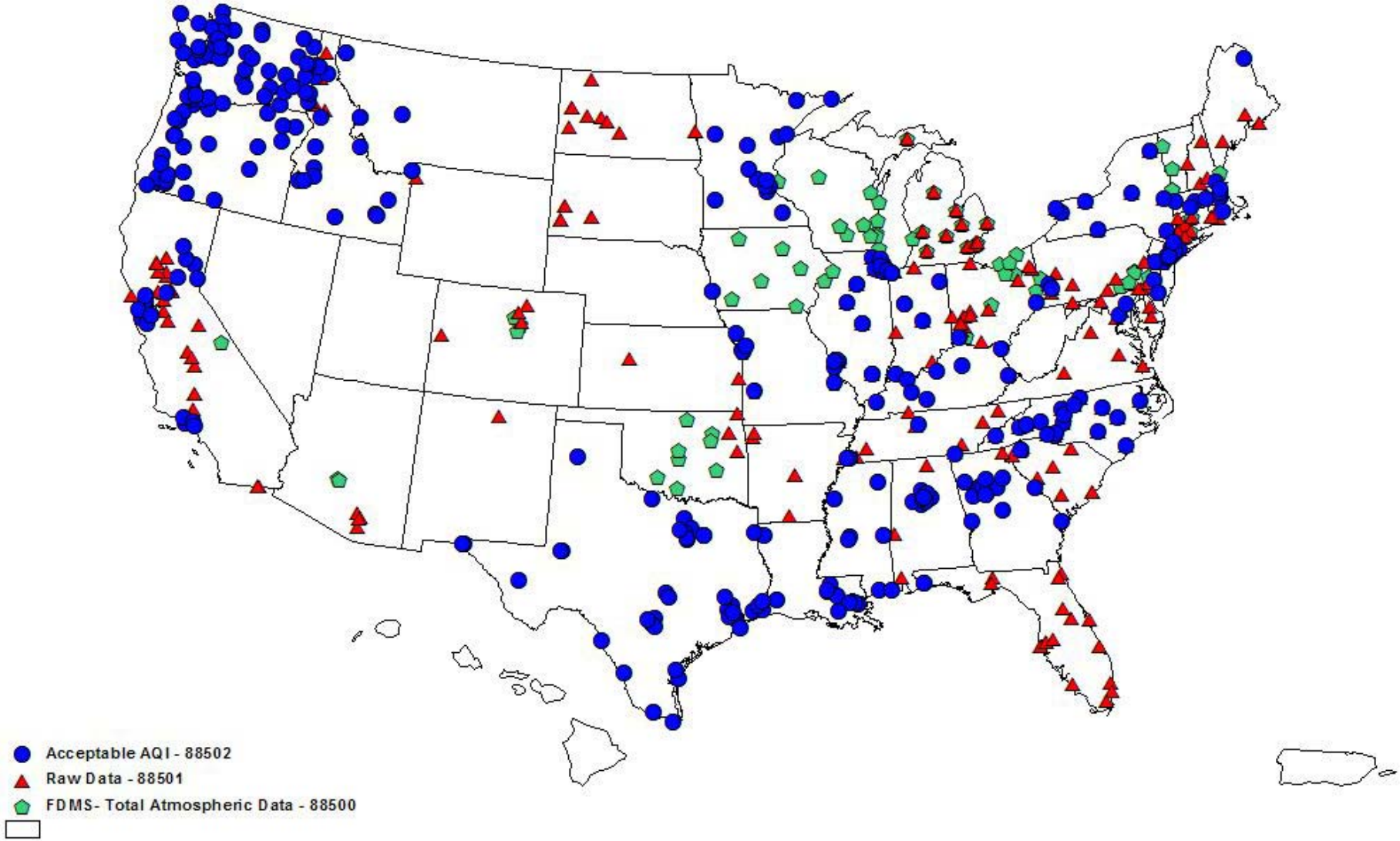
Parameter Codes for Reporting $PM_{2.5}$ Data to AQS

Parameter Name	Parameter Code	Purpose
PM2.5 LOCAL CONDITIONS	88101	Appropriate code for all FRM/FEM/ARMs
PM2.5 TOTAL ATMOSPHERIC	88500	Valid data from methods measuring total $PM_{2.5}$ aerosols in the atmosphere, including those that can be volatilized from the FRM
PM2.5 RAW DATA	88501	Valid uncorrected data that does not reasonably match the FRM
ACCEPTABLE PM2.5 AQI & SPECIATION MASS	88502	Valid data that does reasonably match the FRM with or without correction, but not to be used in NAAQS decisions
PM2.5 VOLATILE CHANNEL	88503	Store important related data such as the FDMS reference channel

88101 is only for methods eligible for NAAQS decision-making and has been shut off for continuous data as of Feb 2007.

Technical Note covering new codes available at http://www.epa.gov/ttn/amtic/cpreldoc.html

Parameter Codes for Reporting $PM_{2.5}$ Data to AQS



Approved Regional Methods (ARMs) for $PM_{2.5}$

- A $PM_{2.5}$ continuous method approved for use within a State, local, or Tribal agency used to meet multiple monitoring objectives such as NAAQS, Air Quality Index, and forecast validation.
- Allows agencies to optimize their $PM_{2.5}$ network with well performing (and currently deployed) continuous methods that may not perform well in all required FEM testing regions.
- Monitoring Agency-driven Testing Process
  - Uses basically the same performance criteria as Class III methods.
  - Testing occurs at subset of sites in the network within which it's intended to be used.
- Approvals
  - Initial ARM application approved through EPA's Office of Research & Development.
  - Subsequent applications for method in another agency's network approved by EPA Regional Office.
  - All procedures (including proposed use of data transformations) must be fully described in Quality Assurance Program Plan accompanying ARM application.
  - OAQPS developed FEM/ARM tool to help with calculations

Summary Sheet of FEM/ARM Tool

File Edit View Insert Format Tools Data Window Help

Summary

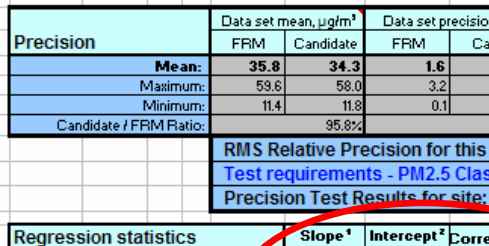
Applicant:	Example test data (simulated data)
Candidate method:	ACME Pretty Good PM2.5 Sampler - PM2.5 Class III
Test site:	Example test site - (Site location B)

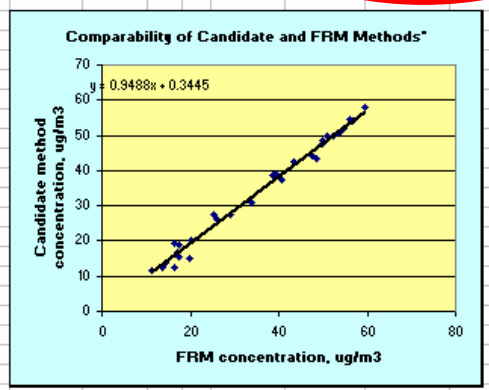
Data sets	Number
Valid data sets available:	30
Number of valid data sets required for Class III, location B:	23
Number of valid data sets for this test is:	OK
Additional data sets needed:	

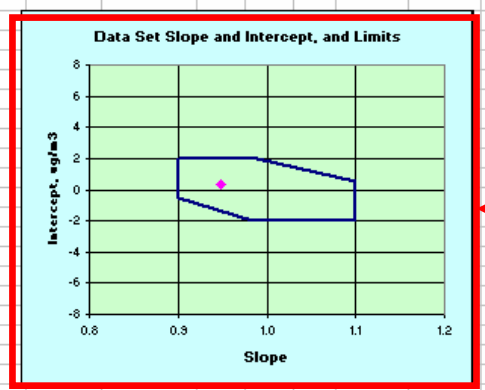
Precision	Data set mean, µg/m³		Data set precision, µg/m³		Relative precision (CV)	
	FRM	Candidate	FRM	Candidate	FRM	Candidate
Mean:	**35.8**	**34.3**	**1.6**	**2.0**	**4.4%**	**8.0%**
Maximum:	59.6	58.0	3.2	3.3	8.1%	25.8%
Minimum:	11.4	11.8	0.1	0.8	0.3%	1.5%
Candidate / FRM Ratio:		95.8%		130.9%		184.4%
RMS Relative Precision for this site:					4.8%	10.1%
Test requirements - PM2.5 Class III:					10.0%	15.0%
Precision Test Results for site:					OK	PASS

Regression statistics		Slope[1]	Intercept[2]	Correlation (r)
Statistics for this test site:		0.949	0.345	0.99429
Limits for PM2.5 Class III	Upper:	1.100	2.000	
	Lower:	0.900	-1.384	0.94170
Test Results (Pass/Fail):		PASS	PASS	PASS

[1]Multiplicative bias [2]Additive bias







Criteria for number of valid data sets with test

Criteria for Precision with test

Criteria for Slope (multiplicative bias), Intercept (additive bias), and Correlation with test

Illustration of Bias acceptance limits with result for candidate method

FEM/ARM Tool Notes

- Templates are intended to help facilitate consistency in FEM and ARM applications; their use is not required.
- Availability of FEM and ARM Case Study Templates
  - http://www.epa.gov/ttn/amtic/pm25fem/
  - Questions/comments can be sent to Tim Hanley
    - Email: hanley.tim@epa.gov
  - Expect final in March 2007; also on AMTIC web site
- Acknowledgments
  - EPA ORD
    - Robert Vanderpool
    - Elizabeth Hunike
  - RTI
    - Frank McElroy

Other Minimum Monitoring Network Requirements

Ozone

- What's new:
  - Minimum monitoring requirements based on MSA population and design value
- For your consideration:
  - Basically business as usual
  - Reevaluate monitor locations as needed to insure you are in appropriate locations to measure maximum concentration and meet other objectives
  - EPA has agreed to propose action to revise or retain the current ozone standards by June 20, 2007 and take final action by March 12, 2008 – follow the process

CO, SO_2, NO_2 Monitors

- What's new:
  - No minimums, but need EPA approval to remove
  - Rule contains some specific conditions in which removal will be approved.
    - Clean enough AQ
    - Redundant monitors
  - Other cases to be addressed individually, based on need for the data
  - May need to amend maintenance plan.
- For your consideration:
  - Revisit monitoring objectives
  - Discontinue low value sites even though marginal savings may not be large in the short term. Watch out for SIP commitments for specific monitors and/or contingency measures tied to monitoring triggers
  - Replace retained monitors with high-sensitivity models to improve tracking of decreasing ambient values

NCore
Multi-pollutant Monitoring Network

Purpose of NCore Network

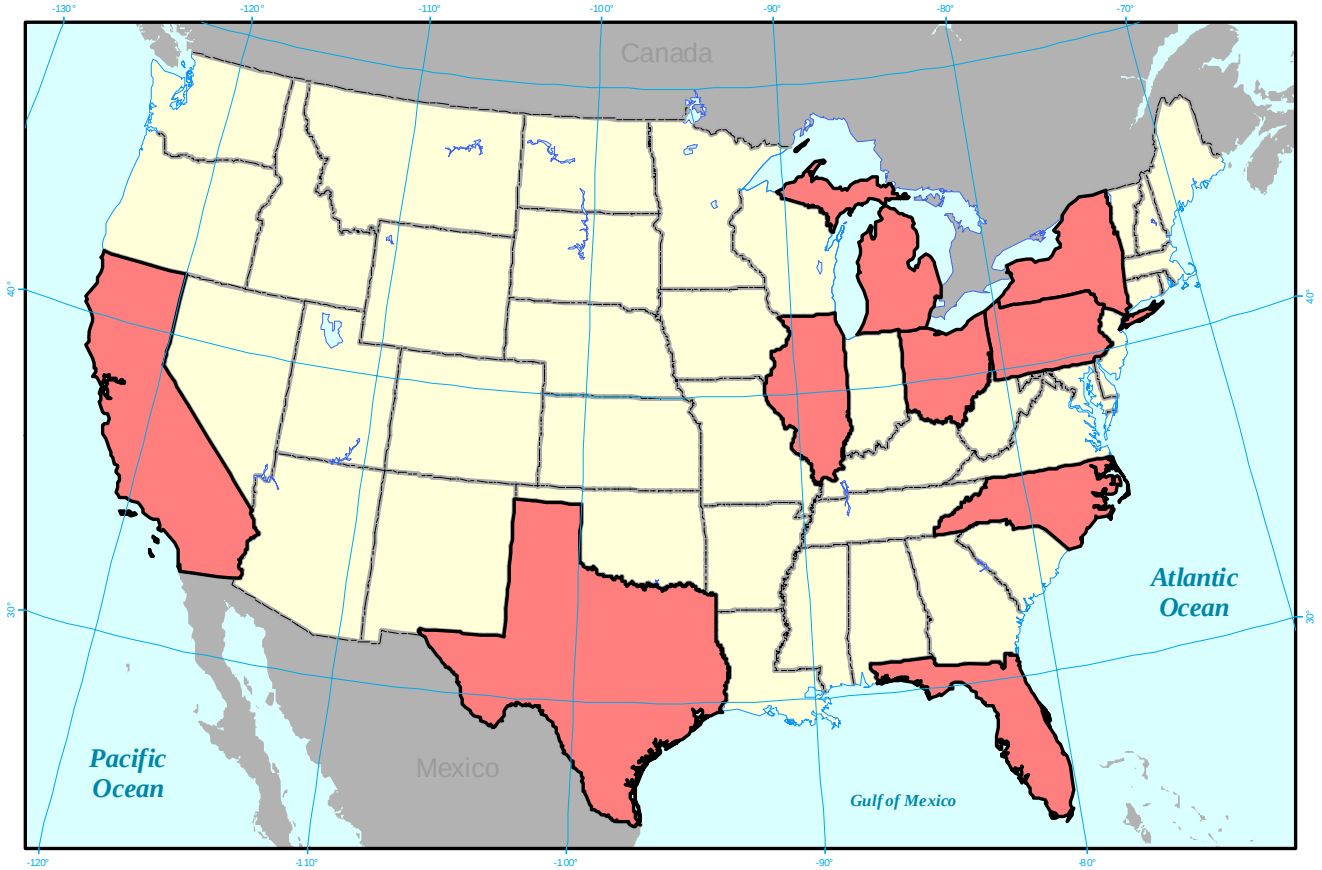
- To develop a data set of co-located measurements of:
  - PM and its precursors and components
  - Ozone and its precursors
  - Meteorology important to PM and ozone formation
- This data will be used to:
  - Assess contributions of various source categories
  - Improve our understanding of PM and ozone formation
  - Validate and improve models
  - Provide information for health studies
  - Track effectiveness of emission reduction programs
  - Support science and ecosystem studies

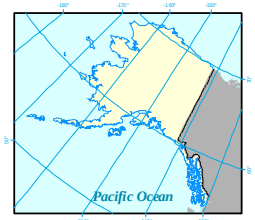
Proposed NCore Site 361010003
Pinnacle Park, New York

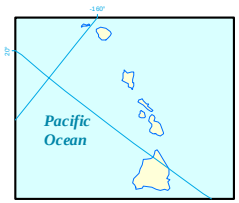
Minimum NCore Network Requirements

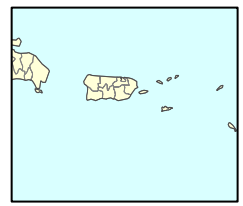
1 Site

2 or 3 Sites









(All fifty States, District of Columbia, Puerto Rico, Virgin Islands)

NCore Parameter Requirements

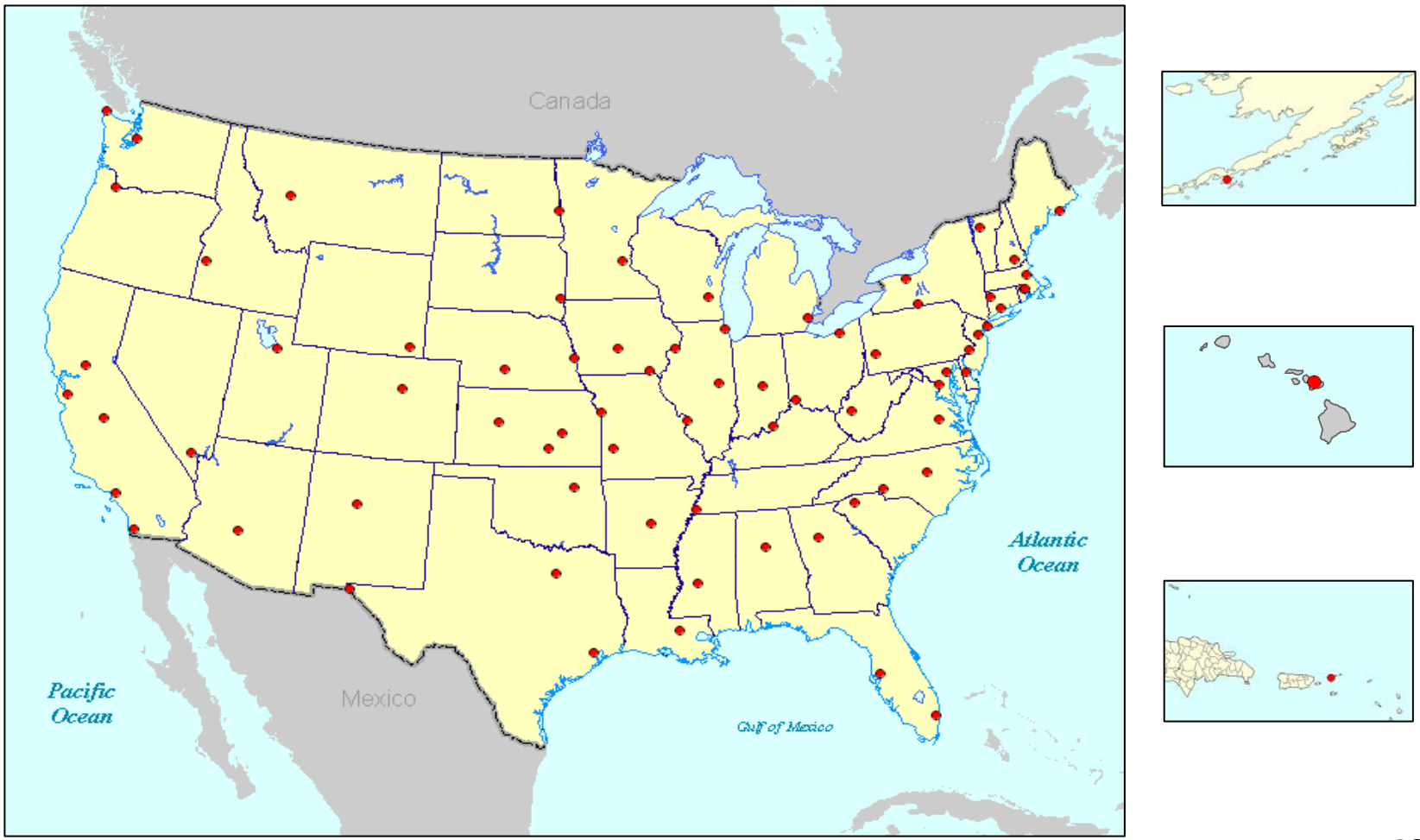
Measurements	Comments
$PM_{2.5}$ FRM mass	typically 24 hr. average every 3rd day
$PM_{2.5}$ speciation	Organic and elemental carbon, major ions and trace metals (24 hour average; every 3rd day)
$PM_{10-2.5}$ FRM mass	typically 24 hr. average every 3rd day
$PM_{10-2.5}$ speciation	typically 24 hr. average every 3rd day
continuous $PM_{2.5}$ mass	1 hour reporting interval
ozone (O_3)	all gases through continuous monitors
carbon monoxide (CO)	capable of trace levels (low ppb and below) where needed
sulfur dioxide (SO_2)	capable of trace levels (low ppb and below) where needed
nitrogen oxide (NO)	capable of trace levels (low ppb and below) where needed
total reactive nitrogen (NO_y)[1]	capable of trace levels (low ppb and below) where needed
surface meteorology[2]	wind speed and direction, temperature, relative humidity

[1] In areas with negligible expected difference between NOy and NOx measured concentrations, the Administrator may allow for waivers that permit NOx monitoring to be substituted for the required NOy monitoring at applicable NCore sites.
[2] The requirement for meteorological monitoring can be waived by the Administrator if the NCore site is not suitable for representative meteorological measurements due to the site's physical surroundings and it is possible for nearby meteorological measurements to fulfill this data requirement.

Status Of NCore Pilot Program

- We have information on approximately 70 existing and potential NCore site locations. No sites formally approved yet by OAQPS.
  - Final proposed NCore sites must be included in July 1, 2009 plan but earlier approvals would be optimal.
- OAQPS is developing an AMTIC-based web tool to help organize information about NCore sites and serve as an outreach tool for potential data users. How you can help:
  - Insure that all fields in AQS are completed for candidate sites.
  - Follow-up on data request sent through Regions last summer for GPS-obtained coordinates, site and cardinal direction photographs (8 sectors), currently operating parameters.
  - Please forward information to Kevin Cavender at: (cavender.kevin@epa.gov) – (919)-541-2364.
  - Web tool should become available spring 2007 after R.O. review.

Proposed NCore Site Locations



Quality Assurance

- **What's New**
  - Many sensible relaxations of periodic checks, etc.
    - 1:12 collocation, instead of 1:6
  - A few new or stronger requirements.
    - Flow rate audits on high volume PM
  - Revised precision and bias calculations
  - Flexible audit ranges to include trace level gases
  - States must make sure independent audits happen and cover with STAG $.
  - TTP (through the probe) NPAP gearing up for precursor gas monitoring to support NCore deployment
  - Primary Quality Assurance Organization (PQAO) terminology and implementation
- QA contact: Dennis Mikel
  - mikel.dennisK@epa.gov
  - 919-541-5511

P&B Guidance and Data Assessment Statistical Calculator (DASC) Software

DASC (Data Assessment Statistical Calculator)

Site: *{Enter Site ID or Name Here}*

Step 1	Step 2
Pick a Pollutant	*Pick a Statistic to Calculate*
Automated Methods	(●) Precision Estimate
(●) SO2	( ) Bias Estimate
( ) NO2	( ) Absolute Bias Estimate
( ) O3	( ) Semi-Annual Flow Rate
( ) CO	( ) One-Point Flow Rate
( ) PM 2.5	
( ) PM10	
( ) PM 10-2.5	
Manual Methods	***Step 3***
( ) PM 2.5	
( ) PM 10	[Go To Worksheet]
( ) PM 10-2.5	
( ) Lead	

Gaseous Assessments

Site ID: Burdens | Pollutant type: NOy API

Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d_sqrd	d_abs	d_abs ^2
19.9	20	-0.500	-6.500	0.250	0.500	0.250
20	20	0.000	75th Percentile	0.000	0.000	0.000
19.8	20	-1.000	-4.000	1.000	1.000	1.000
19.9	20	-0.500		0.250	0.500	0.250
20	20	0.000		0.000	0.000	0.000
20.1	20	0.500		0.250	0.500	0.250
19.9	20	-0.500		0.250	0.500	0.250
19.9	20	-0.500		0.250	0.500	0.250
19.6	20	-2.000		4.000	2.000	4.000
19.6	20	-2.000		4.000	2.000	4.000
19.7	20	-1.500		2.250	1.500	2.250
19.6	20	-2.000		4.000	2.000	4.000
19.8	20	-1.000		1.000	1.000	1.000
19.6	20	-2.000		4.000	2.000	4.000
19.5	20	-2.500		6.250	2.500	6.250
19.7	20	-1.500		2.250	1.500	2.250
19.6	20	-2.000		4.000	2.000	4.000
19.6	20	-2.000		4.000	2.000	4.000
19.1	20	-4.500		20.250	4.500	20.250
19.5	20	-2.500		6.250	2.500	6.250
19.4	20	-3.000		9.000	3.000	9.000
19.6	20	-2.000		4.000	2.000	4.000
19.5	20	-2.500		6.250	2.500	6.250
19.5	20	-2.500		6.250	2.500	6.250
19.4	20	-3.000		9.000	3.000	9.000
19.5	20	-2.500		6.250	2.500	6.250
19.3	20	-3.500		12.250	3.500	12.250
19.1	20	-4.500		20.250	4.500	20.250
19.1	20	-4.500		20.250	4.500	20.250
19.3	20	-3.500		12.250	3.500	12.250
19.2	20	-4.000		16.000	4.000	16.000
19.2	20	-4.000		16.000	4.000	16.000
19.1	20	-4.500		20.250	4.500	20.250
19.2	20	-4.000		16.000	4.000	16.000

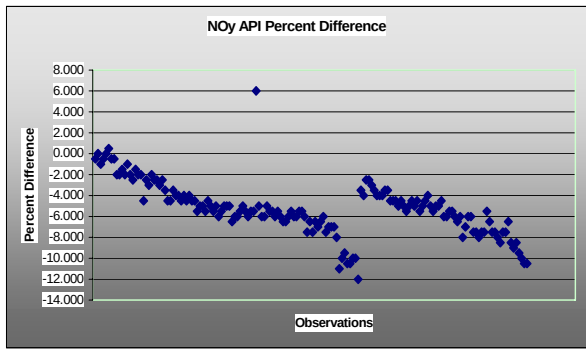
CV_ub (%) | **Bias (%)**

n	st dev(d)	st dev (d^2)	sum(d_abs)	"AB" (Eqn 3a)
162	2.544	27.349	863.500	5.330
n-1	**sum(d)**	**sum(d^2)**	**sum(d_abs^2)**	**"AS" (Eqn 3b)**
161	-850.500	5507.250	5507.250	2.370

Bias (%) (Eqn 3)	Both Signs Positive
5.64	FALSE
Signed Bias (%)	Both Signs Negative
-5.64	TRUE

CV (%) (Eqn 2): 2.74

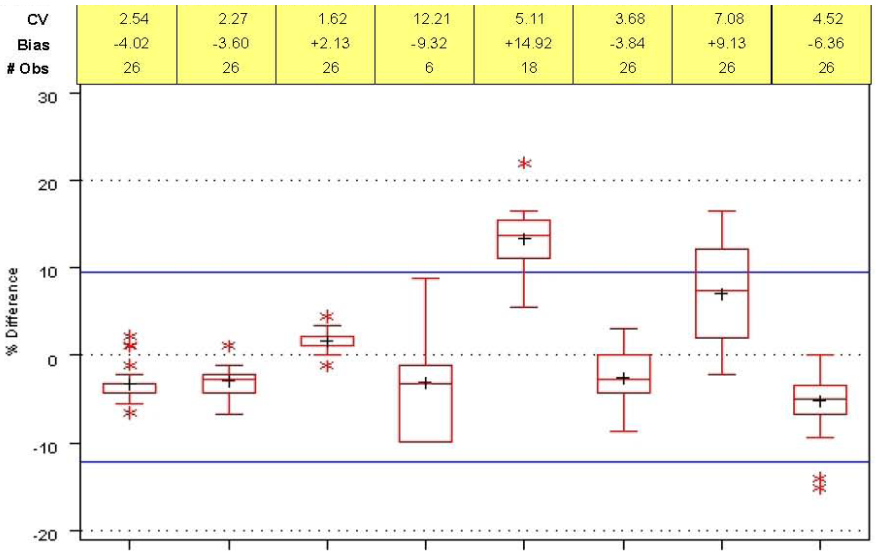
Upper Probability Limit	Lower Probability Limit
-0.26	-10.24



AMP 255 Report

Region	State	Agency	Site	CFR Lower Limit	CFR Upper Limit	Bias UB	CV UB
01	CT	0251	090010017	NA	NA	-2.17	0.77
01	CT	0251	090011123	NA	NA	4.15	4.88
01	CT	0251	090013007	NA	NA	-4.35	2.17
01	CT	0251	090019003	NA	NA	2.98	3.13
01	CT	0251	090031003	NA	NA	1.62	1.92
01	CT	0251	090070007	NA	NA	-3.95	1.96
01	CT	0251	090090027	NA	NA	0.60	0.84
01	CT	0251	090093002	NA	NA	-3.75	1.98
01	CT	0251	090110008	NA	NA	2.11	2.52
01	CT	0251	090131001	NA	NA	-4.04	1.22
01	CT	0251	All - NSP	-6.72	+3.53	-2.73	2.77
01	MA	0660	250010002	NA	NA	-1.61	1.35
01	MA	0660	250034002	NA	NA	+1.80	1.52
01	MA	0660	250051002	NA	NA	-2.99	0.61
01	MA	0660	250092006	NA	NA	-4.49	4.14
01	MA	0660	250094004	NA	NA	3.50	4.41
01	MA	0660	250095005	NA	NA	-1.64	1.9
01	MA	0660	250130008	NA	NA	1.73	2.11
01	MA	0660	250150103	NA	NA	+2.64	1.85
01	MA	0660	250154002	NA	NA	-4.84	2.14
01	MA	0660	250171102	NA	NA	-1.31	0.49
01	MA	0660	250213003	NA	NA	-1.32	1.13

- Monitoring Orgs. Can run this as often as they wish
- OAQPS will run annually
- Box–and-whisker plots included in annual summary

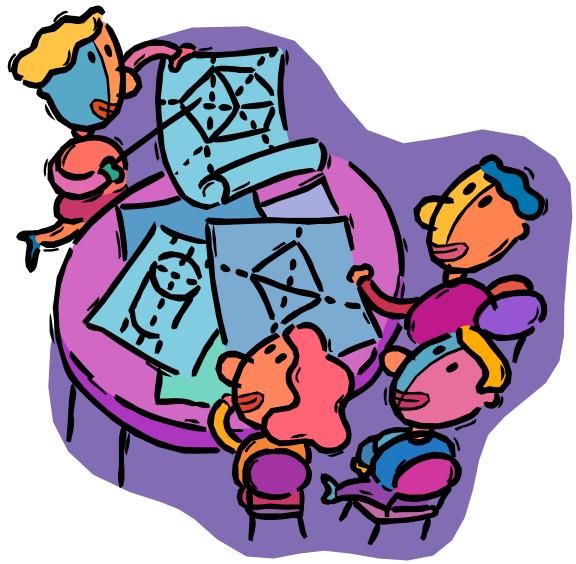


http://www.epa.gov/ttn/amtic/parslist.html

Annual Monitoring Network Plan

- Regularly scheduled evaluation of monitoring network
  - Includes evidence that applicable regulations and appendices are being met for existing network
  - Specific plan elements listed in 40 CFR Part 58.10(b)
- First plan under rule revisions due July 1, 2007
  - Draft plan must be made available for public inspection at least 30 days prior to submission to EPA.
    - Plans that propose modifications must be approved by the EPA Regional Administrator, who shall provide opportunity for public comment and shall approve or disapprove within 120 days (public comment period can be waived based on certain conditions).
  - Many State plans are currently out for public inspection or have already been forwarded to R.A.

Updates and Discussion Items



Discussion Item – AQS Site ID Policy with "Minor" Relocations

- Question – How to decide when a site ID needs to be changed following a "minor" site relocation
  - Historically, decisions made on a case by case basis. Consult with Regional Office.
  - Scale of representation is key – moving a microscale site a short distance may be very significant.
  - AQS doesn't retain site coordinate information so new coordinates will "overwrite" old information, causing site to "hop" around when comparing maps over time
    - Use site comment field to document minor relocations
  - Collocated monitoring at old and new sites desirable
  - Can be harder to calculate design values when data records split among site ID's.

Discussion Item – Having AQS calculate PM10 in STP from LTP reported values

- Issue – Current PM10 NAAQS requires concentrations value to be corrected to standard temperature and pressure.
  - Other PM data (PM2.5, PM10-2.5) reported to local conditions (LTP)
  - Agencies wish to be relieved of double reporting burden
    - Scenario – Report PM10 in LTP and average temperature and pressure
    - AQS handles the STP conversion for the PM10 NAAQS
  - EPA recognizes the value in this capability but AQS update resources are very limited.
  - Rule required AQS updates must get highest priority
  - Status - In its long term planning for AQS enhancements, EPA will consider the relative priority of an AQS modification to be able to automatically calculate the corresponding PM-10 values at standard conditions from a submittal of PM-10 data at local conditions

Update - PM2.5 Speciation Carbon Conversion

Joann Rice – Methods Contact – rice.joann@epa.gov

- $PM_{2.5}$ Chemical Speciation Network (CSN):
  - Speciation Trends Network (STN)
    - 54 Trends sites: Largely static urban monitoring stations and protocols for sampling and analysis
  - State and Local Air Monitoring Stations (SLAMS)
    - Currently ~150 sites: monitors for state and local agency directed monitoring objectives
- Changes in the network to address inconsistencies in carbon sampling and analysis procedures used in urban CSN and rural IMPROVE programs
  - Field blank collection and subtraction also changing

Update - PM2.5 Speciation Carbon Conversion

- Phase I completed May 2007
  - May 3rd start date for monitoring
- Phase 2 site selection starting now
  - Expect fall 2007 installation start date
- URG3000N web page created
  - http://epa.gov/ttn/amtic/specurg3000.html
- AQS reporting implications
  - New AQS method codes and parameter codes were developed to accept organic carbon (OC) and elemental carbon (EC) data and the fractions of OC and EC at local conditions. This work is being finalized.
  - Field Guide to Air Quality Data (Nick Mangus)
    - http://www.epa.gov/ttn/airs/aqsdatamart/documentation/index.htm
    - A description of every field in AQS, the AQS input transactions, the AQS reports, and the AQS Data Mart.

Questions