



Annual Air Monitoring Data Certification and Concurrence Process

National Ambient Air Monitoring Conference August 2014

The Actual Requirement in CFR Language



§ 58.15 Annual air monitoring data certification.

(a) The State, or where appropriate local, agency shall submit to the EPA Regional Administrator an annual air monitoring data **certification letter** to certify data collected at all SLAMS and at all FRM, FEM, and ARM SPM stations that meet criteria in appendix A to this part from January 1 to December 31 of the previous year..... “

(2) Annual data certification letter is **due by May 1 of each year.**

AMP450 NC

(b) Along with each certification letter, the State shall submit to the Administrator (through the appropriate Regional Office) **an annual summary report** of all the ambient air quality data collected at all SLAMS and at SPM stations using FRM, FEM, or ARMs. ...”

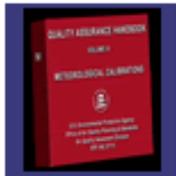
AMP600

(c) Along with each certification letter, the State shall submit to the Administrator (through the appropriate Regional Office) **a summary of the precision and accuracy data** for all ambient air quality data collected at all SLAMS and at SPM stations using FRM, FEM, or ARMs. ...”

Data Certification Information On AMTIC



- [Passive Monitoring](#)



Quality Assurance/Quality Control

- [Quality Assurance Guidance Documents](#)
- [National Performance Evaluation Program](#)
- [Quality Indicator Assessment Reports](#)
- [QA/QC Workgroup Activities \(national meeting\)](#)
- [Newsletters](#)
- [Pollutant/Network Specific QA](#)
- [QC of Filters for PM2.5, PM10 and Low Volume Pb](#)
- [Data Certification/Validation](#)



Regulations and Guidance

- [National Air Monitoring Strategy](#)

Data Certification/Validation

- [Data Certification Flag Values \(PDF\)](#) (1pg, 59k)
- [Ambient Air Monitoring Data Certification Q&A for CY2013 \(PDF\)](#) (5pp, 100k)
- [Additional Information Related to the AMP600 Data Certification Process \(PDF\)](#) (11pp, 848k)

Data Certification Qualifier Values



Flag Value	Application
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" concurrence flag.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AMP256 report or the certification and quality assurance report.
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, <u>the</u> amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.

Criteria that Generate Green (Acceptable) Warning (Yellow) and “N” Qualifiers (Red)



Assessment	Current CFR Requirement or Guidance	Green (Acceptable)	Yellow (Warning)	Red (Recommend N Flag)	Comments
Technical Systems Audit	PQAO every 3 years	TSA within 3 years	TSA within 4 years	TSA > 5 years	Not a monitoring Org responsibility. Will be reported on summary page not by pollutant
Gaseous Criteria Pollutants					
Routine Data Completeness	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use 100* Number of hourly obs/number of hours in monitor sample period
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for “N” flag if QAPP not approved.
1-Point QC Completeness	75%	≥75%	65-75%	<65%	Based on 26, 1-point QC for a year. Calculated based on the number of days the monitor operated.
1-Point QC Precision	7% O ₃ , 10% others	≤7% O ₃ , 10% others	8-20% O ₃ 11-25% others	> 20% O ₃ > 25% others	Based on all valid 1-point QC checks in AQS for the year. Value should reflect AMP-256 value
1-Point QC Bias	±7% O ₃ , ±10% others	≤ ±7% O ₃ , ≤ ±10% others	± 8-20% O ₃ ±11-25% others	> ±20% O ₃ > ±25% others	Based on all valid 1-point QC checks in AQS. Value should reflect AMP-256 value
Annual PE Completeness	1 PE/year 3 audit levels	1 PE/year 3 audit levels	1 PE/year 2 audit levels	No PE or 1 audit level	Will not count more than one actual value in an audit level. For example, two audit in one level count as 1 audit level.
Annual PE Bias O ₃ , SO ₂ , NO ₂	≤ ±1.5 ppb / ±15%	≤ ±1.5 ppb / ±15%	≤ ± 1.6-3.0 ppb / ± 16-25%	> ±3.0 ppb / ± 25%	Average PD of all PE values for the monitor
CO	≤ ±0.03 ppm/ ± 15%	≤ ±0.03 ppm/ ± 15%	≤ ± 0.04-0.06 ppm/ ± 16-25%	> ±0.06 ppm/ ± 25%	
NPAP Audit Completeness -PQAO	20% of sites in PQAO	20% of sites in PQAO	10-19% of sites in PQAO	<10% of sites in PQAO	Not a monitoring Org responsibility. Will be marked as “Y”
NPAP Bias	≤ ±10% O ₃ ≤ ±15% others	≤ ±10% O ₃ ≤ ±15% others	± 11-20% O ₃ ±16-25% others	> ±20% O ₃ > ±25% others	median PD for all values at a site and median PD for PQAO level estimate
NPAP Audit Completeness -Site	4 levels	4 levels	2-3 levels	≤1 level	Not a monitoring Org responsibility
Outliers					Not implemented in 2012

Criteria that Generate Green (Acceptable) Warning (Yellow) and “N” Qualifiers (Red)



Assessment	Current CFR Requirement or Guidance	Green (Acceptable)	Yellow (Warning)	Red (Recommend N Flag)	Comments
Technical Systems Audit	PQAO every 3 years	TSA within 3 years	TSA within 4 years	TSA > 5 years	Not a monitoring Org responsibility. Will be reported on summary page not by pollutant
Gaseous Criteria Pollutants					
Routine Data Completeness	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use 100* Number of hourly obs/number of hours in monitor sample period
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for “N” flag if QAPP not approved.
1-Point QC Completeness	75%	≥75%	65-75%	<65%	Based on 26, 1-point QC for a year. Calculated based on the number of days the monitor operated.

1. Blue shaded rows are evaluations that will be reported (when data is available) but not used in certification flag settings
2. One Red for any monitor will elicit a AQS recommended “N” flag
3. Three warnings for any monitor will elicit an AQS recommended “N” flag
4. Outlier reports will not be used in 2012-2014 reporting.

AMP600 Summary Report Before Certifying Agency Certification



Data Evaluation and Concurrence Report Summary

Jul. 22, 2014

Certification Year: 2012

Certifying Agency (CA):

Pollutants in Report:

<u>Parameter Name</u>	<u>Code</u>	<u>Monitors Evaluated</u>	<u>Monitors Recommended for Concurrence by AQS</u>	<u>Monitors NOT Recommended for Concurrence by AQS</u>
Carbon monoxide	42101	3	3	0
Nitrogen dioxide (NO2)	42602	2	2	0
Ozone	44201	16	14	2
PM10 Total 0-10um STP	81102	8	7	1
PM2.5 - Local Conditions	88101	12	9	3
Sulfur dioxide	42401	4	4	0

PQAOs in Report:

<u>PQAO Name</u>	<u>PQAO Code</u>	<u>TSA Date</u>
<input type="text"/>		09/27/12

Summary of 'N' flags for all pollutants:

<u>PQAO</u>	<u>Parameter Code</u>	<u>AQS Site-ID</u>	<u>POC</u>	<u>AQS Recommended Flag</u>	<u>Cert. Agency Recommended Flag</u>	<u>Reason for AQS Recommendation</u>
<input type="text"/>	44201	-019-1100	1	N		Annual Performance Evaluation Audit Missing or 1 Level.
<input type="text"/>	44201	-029-0032	1	N		Annual Performance Evaluation Audit Missing or 1 Level.
<input type="text"/>	88101	-011-0016	2	N		Annual Summary completeness < 70%.
<input type="text"/>	88101	-003-0014	1	N		Annual Summary completeness < 70%.
<input type="text"/>	88101	-009-0103	1	N		PQAO-Level Collocation criteria not met.
<input type="text"/>	81102	-003-0014	1	N		Flow Rate Audit completeness < 65%.

Signature of Monitoring Organization Representative: _____

AMP600- Ozone Before Certification



Certifying Year: 2012
 Certifying Agency Code: [Redacted]
 Parameter: Ozone (44201) (ppm)

PQAO Name: [Redacted]

QAPP Approval Date: 06/23/2009

NPAP Audit Summary:

Number of Valid Audits	NPAP Bias	Criteria Met
7	1.21951	Y

AQS Site ID	POC Monitor Type	Routine Data						One Point Quality Check			Annual PE		NPAP		Concur. Flag			
		Mean	Min	Max	Exceed. Count	Outlier Count	Perc. Comp.	Precision	Bias	Complete	Bias	Complete	Bias	PQAO Level Criteria	QAPP Appr.	Aqs Rec Flag	CA Rec Flag	Epa Concur
001-0014	2 SPM	0.042	0.016	0.085	0	0	93	2.95	+/-2.39	100	- 3.54	100		Y	Y	Y		
003-1100	1 TRIBAL	0.038	0.014	0.059	0	0	91	1.87	+/-1.36	100	- 0.43	100		Y	Y	Y		
005-2003	1 SLAMS	0.046	0.014	0.094	0	0	99	1.52	+3.35	100	0.90	100	0.00	Y	Y	Y		
009-0102	1 SLAMS	0.047	0.024	0.080	0	0	98	2.64	+/-1.99	100	- 3.74	100	1.01	Y	Y	Y		
009-0103	1 SLAMS	0.044	0.017	0.078	0	0	95	1.43	-2.56	100	- 1.35	100	1.22	Y	Y	Y		
011-2005	1 SLAMS	0.042	0.014	0.082	0	0	99	1.40	+/-1.28	100	- 2.02	100		Y	Y	Y		
013-0004	2 SLAMS	0.043	0.021	0.087	0	0	96	4.69	+/-3.63	100	0.41	100		Y	Y	Y		
017-3001	1 SPM	0.038	0.010	0.081	0	0	99	0.93	+/-1.13	100	- 1.41	100		Y	Y	Y		
019-1100	1 TRIBAL	0.040	0.019	0.071	0	0	89	1.53	+/-1.04	100		0	3.70	Y	Y	N		
019-4008	1 SLAMS	0.041	0.018	0.069	0	0	99	2.27	+/-1.96	100	0.67	100		Y	Y	Y		
023-0006	1 SPM	0.043	0.014	0.108	0	0	99	8.98	+/-5.88	100	0.07	100	1.00	Y	Y	Y		
029-0019	1 SPM	0.040	0.021	0.075	0	0	98	3.91	+/-3.60	100	0.72	100		Y	Y	Y		
029-0032	1 TRIBAL	0.038	0.011	0.062	0	0	99	1.27	+/-1.46	100		0		Y	Y	N		
031-0038	1 SPM	0.044	0.011	0.094	0	0	99	1.89	+3.68	100	3.43	100		Y	Y	Y		
031-0040	1 SPM	0.044	0.017	0.088	0	0	98	1.13	+2.30	100	2.61	100		Y	Y	Y		
031-2002	1 SLAMS	0.047	0.016	0.096	0	0	99	1.59	+/-1.82	100	0.30	100	1.89	Y	Y	Y		

No values

Certification Form for Certifying Agency



Query Criteria

Year Agency
State County Code
CBSA Code

Classification Parameter Ozone
Certification Flag

Certifications

Year	AQS Monitor ID	AQS Recommended Flag	Monitoring Agency Request	EPA Evaluation Value	Monitoring Agency Comment	Region Comment
2012	001-0014-44201-2	Y	Y			
2012	005-0029-44201-1	Y	Y			
2012	005-2003-44201-1	Y	Y			
2012	009-0102-44201-1	Y	Y			
2012	009-0103-44201-1	Y	Y			
2012	011-2005-44201-1	Y	Y			
2012	013-0004-44201-2	Y	Y			
2012	017-3001-44201-1	Y	Y			
2012	019-4008-44201-1	Y	Y			
2012	023-0006-44201-1	Y	Y			
2012	029-0019-44201-1	Y	Y			
2012	031-0038-44201-1	Y	Y			
2012	031-0040-44201-1	Y	Y			
2012	031-2002-44201-1	Y	Y			
2012	029-0032-44201-1	N	Y			
2012	019-1100-44201-1	N	Y			
2012	003-1100-44201-1	Y	Y			

If certifying this data, we'd really like a Certifying Agency qualifier

AMP600

After Certifying Agency Certification



Certifying Year: 2012
 Certifying Agency Code: [Redacted]
 Parameter: Ozone (44201) (ppm)
 PQA Name: [Redacted]

QAPP Approval Date: 06/23/2009

NPAP Audit Summary:

Number of Valid Audits	NPAP Bias	Criteria Met
7	1.21951	Y

AQS Site ID	POC Monitor Type	Routine Data						One Point Quality Check			Annual PE		NPAP		QAPP Appr.	Concur. Flag		
		Mean	Min	Max	Exceed. Count	Outlier Count	Perc. Comp.	Precision	Bias	Complete	Bias	Complete	Bias	PQAO Level Criteria		Aqs Rec Flag	CA Rec Flag	Epa Concur
001-0014	2 SPM	0.042	0.016	0.085	0	0	93	2.95	+/-2.39	100	- 3.54	100		Y	Y	Y	Y	
003-1100	1 TRIBAL	0.038	0.014	0.059	0	0	91	1.87	+/-1.36	100	- 0.43	100		Y	Y	Y	Y	
005-2003	1 SLAMS	0.046	0.014	0.094	0	0	99	1.52	+3.35	100	0.90	100	0.00	Y	Y	Y	Y	
009-0102	1 SLAMS	0.047	0.024	0.080	0	0	98	2.64	+/-1.99	100	- 3.74	100	1.01	Y	Y	Y	Y	
009-0103	1 SLAMS	0.044	0.017	0.078	0	0	95	1.43	-2.56	100	- 1.35	100	1.22	Y	Y	Y	Y	
011-2005	1 SLAMS	0.042	0.014	0.082	0	0	99	1.40	+/-1.28	100	- 2.02	100		Y	Y	Y	Y	
013-0004	2 SLAMS	0.043	0.021	0.087	0	0	96	4.69	+/-3.63	100	0.41	100		Y	Y	Y	Y	
017-3001	1 SPM	0.038	0.010	0.081	0	0	99	0.93	+/-1.13	100	- 1.41	100		Y	Y	Y	Y	
019-1100	1 TRIBAL	0.040	0.019	0.071	0	0	89	1.53	+/-1.04	100		0	3.70	Y	Y	N	★	
019-4008	1 SLAMS	0.041	0.018	0.069	0	0	99	2.27	+/-1.96	100	0.67	100		Y	Y	Y	Y	
023-0006	1 SPM	0.043	0.014	0.108	0	0	99	8.98	+/-5.88	100	0.07	100	1.00	Y	Y	Y	Y	
029-0019	1 SPM	0.040	0.021	0.075	0	0	98	3.91	+/-3.60	100	0.72	100		Y	Y	Y	Y	
029-0032	1 TRIBAL	0.038	0.011	0.062	0	0	99	1.27	+/-1.46	100		0		Y	Y	N	★	
031-0038	1 SPM	0.044	0.011	0.094	0	0	99	1.89	+3.68	100	3.43	100		Y	Y	Y	Y	
031-0040	1 SPM	0.044	0.017	0.088	0	0	98	1.13	+2.30	100	2.61	100		Y	Y	Y	Y	
031-2002	1 SLAMS	0.047	0.016	0.096	0	0	99	1.59	+/-1.82	100	0.30	100	1.89	Y	Y	Y	Y	

AMP600 Summary

After Certifying Agency Certification



Data Evaluation and Concurrence Report Summary

Jul. 22, 2014

Certification Year: 2012
 Certifying Agency (CA):

Pollutants in Report:

<u>Parameter Name</u>	<u>Code</u>	<u>Monitors Evaluated</u>	<u>Monitors Recommended for Concurrence by AQS</u>	<u>Monitors NOT Recommended for Concurrence by AQS</u>
Carbon monoxide	42101	3	3	0
Nitrogen dioxide (NO2)	42602	2	2	0
Ozone	44201	16	14	2
PM10 Total 0-10um STP	81102	8	7	1
PM2.5 - Local Conditions	88101	12	9	3
Sulfur dioxide	42401	4	4	0

PQAOs in Report:

<u>PQAO Name</u>	<u>PQAO Code</u>	<u>TSA Date</u>
<input type="text"/>		09/27/12

Summary of 'N' flags for all pollutants:

<u>PQAO</u>	<u>Parameter Code</u>	<u>AQS Site-ID</u>	<u>POC</u>	<u>AQS Recommended Flag</u>	<u>Cert. Agency Recommended Flag</u>	<u>Reason for AQS Recommendation</u>
<input type="text"/>	44201	-019-1100	1	N	★ ★	Annual Performance Evaluation Audit Missing or 1 Level.
	44201	-029-0032	1	N		Annual Performance Evaluation Audit Missing or 1 Level.
	88101	-011-0016	2	N	Y	Annual Summary completeness < 70%.
	88101	-003-0014	1	N	Y	Annual Summary completeness < 70%.
	88101	-009-0103	1	N	Y	PQAO-Level Collocation criteria not met.
	81102	-003-0014	1	N	Y	Flow Rate Audit completeness < 65%.

Signature of Monitoring Organization Representative: _____

Evaluation/Concurrence Form for EPA Regions



Query Criteria

Year Agency

State

Classification Parameter Oz

Certifications

Year	AQS Monitor ID	AQS Recommended Flag	Monitoring Agency Request	EPA Evaluation Value
2012	001-0014-44201-2	Y	Y	Y
2012	005-0029-44201-1	Y	Y	Y
2012	005-2003-44201-1	Y	Y	Y
2012	009-0102-44201-1	Y	Y	Y
2012	009-0103-44201-1	Y	Y	Y
2012	011-2005-44201-1	Y	Y	Y
2012	013-0004-44201-2	Y	Y	Y
2012	017-3001-44201-1	Y	Y	Y
2012	019-4008-44201-1	Y	Y	Y
2012	023-0006-44201-1	Y	Y	Y
2012	029-0019-44201-1	Y	Y	Y
2012	031-0038-44201-1	Y	Y	Y
2012	031-0040-44201-1	Y	Y	Y
2012	031-2002-44201-1	Y	Y	Y
2012	029-0032-44201-1	N	★	N
2012	019-1100-44201-1	N	★	N
2012	003-1100-44201-1	Y	Y	Y

AMP600

After EPA Regional Concurrence



Certifying Year: 2012
 Certifying Agency Code: [REDACTED]
 Parameter: Ozone (44201) (ppm)

PQAO Name: [REDACTED]
 QAPP Approval Date: 06/23/2009

NPAP Audit Summary:

Number of Valid Audits	NPAP Bias	Criteria Met
7	1.21951	Y

AQS Site ID	POC Monitor Type	Routine Data						One Point Quality Check			Annual PE		NPAP		Concur. Flag			
		Mean	Min	Max	Exceed. Count	Outlier Count	Perc. Comp.	Precision	Bias	Complete	Bias	Complete	Bias	PQAO Level Criteria	QAPP Appr.	Aqs Rec Flag	CA Rec Flag	Epa Concur
001-0014	2 SPM	0.042	0.016	0.085	0	0	93	2.95	+/-2.39	100	- 3.54	100		Y	Y	Y	Y	Y
003-1100	1 TRIBAL	0.038	0.014	0.059	0	0	91	1.87	+/-1.36	100	- 0.43	100		Y	Y	Y	Y	Y
005-2003	1 SLAMS	0.046	0.014	0.094	0	0	99	1.52	+3.35	100	0.90	100	0.00	Y	Y	Y	Y	Y
009-0102	1 SLAMS	0.047	0.024	0.080	0	0	98	2.64	+/-1.99	100	- 3.74	100	1.01	Y	Y	Y	Y	Y
009-0103	1 SLAMS	0.044	0.017	0.078	0	0	95	1.43	-2.56	100	- 1.35	100	1.22	Y	Y	Y	Y	Y
011-2005	1 SLAMS	0.042	0.014	0.082	0	0	99	1.40	+/-1.28	100	- 2.02	100		Y	Y	Y	Y	Y
013-0004	2 SLAMS	0.043	0.021	0.087	0	0	96	4.69	+/-3.63	100	0.41	100		Y	Y	Y	Y	Y
017-3001	1 SPM	0.038	0.010	0.081	0	0	99	0.93	+/-1.13	100	- 1.41	100		Y	Y	Y	Y	Y
019-1100	1 TRIBAL	0.040	0.019	0.071	0	0	89	1.53	+/-1.04	100		0	3.70	Y	Y	N		N
019-4008	1 SLAMS	0.041	0.018	0.069	0	0	99	2.27	+/-1.96	100	0.67	100		Y	Y	Y	Y	Y
023-0006	1 SPM	0.043	0.014	0.108	0	0	99	8.98	+/-5.88	100	0.07	100	1.00	Y	Y	Y	Y	Y
029-0019	1 SPM	0.040	0.021	0.075	0	0	98	3.91	+/-3.60	100	0.72	100		Y	Y	Y	Y	Y
029-0032	1 TRIBAL	0.038	0.011	0.062	0	0	99	1.27	+/-1.46	100		0		Y	Y	N		N
031-0038	1 SPM	0.044	0.011	0.094	0	0	99	1.89	+3.68	100	3.43	100		Y	Y	Y	Y	Y
031-0040	1 SPM	0.044	0.017	0.088	0	0	98	1.13	+2.30	100	2.61	100		Y	Y	Y	Y	Y
031-2002	1 SLAMS	0.047	0.016	0.096	0	0	99	1.59	+/-1.82	100	0.30	100	1.89	Y	Y	Y	Y	Y

AMP600

After EPA Regional Concurrence



Monitors Summaries

AQS Site ID	POC	Monitor Type	Routine Data (ug/m3)						Flow Rate Verification		Flow Rate Audit		QAPP Appr.	Collocation Concurrence Flag		
			Mean	Min	Max	Exceed. Count	Outlier Count	% Complete	Bias	% Complete	Bias	% Complete		AQS Rec Flag	CA Rec Flag	EPA Rec Concur
003-1011	2	SLAMS	16.62	.0	491.0	0	0	97	+0.19	75	-0.22	100	Y	Y	Y	M

Parameter: PM10 Total 0-10um STP (81102) INTERMITTENT

PQAO Name: [Redacted]

Quality Assurance Project Plan Approval Date: 10/15/2011

Collocation Summary

# Sites	# Sites Req	# Sites Collocated	% Collocated	CV Est	CV UB	Criteria Met?
5	1	1	100	8.87	10.93	Y

Data changed after certification

Monitors Summaries

AQS Site ID	POC	Monitor Type	Routine Data (ug/m3)						Flow Rate Audit		Collocation		QAPP Appr.	Concurrence Flag			
			Mean	Min	Max	Exceed. Count	Outlier Count	% Complete	Bias	% Complete	CV	% Complete		PQAO Crit. Met	AQS Rec Flag	CA Rec Flag	EPA Rec Concur
001-0011	2	SLAMS	15.25	2.0	54.0	0	0	96	+0.66	100			Y	Y	Y	Y	Y
005-0015	2	SPM	21.32	8.0	60.0	0	0	86	+0.36	100	10.93	86	Y	Y	Y	Y	Y
005-0015	3	SPM	19.96	8.0	62.0	0	0	93	+0.78	100			Y	Y	Y	Y	Y
009-0103	2	SPM	6.15	2.0	19.0	0	0	95	-1.20	100			Y	Y	Y	Y	Y
011-0016	2	SLAMS	13.84	2.0	61.0	0	0	91	-0.93	100			Y	Y	Y	Y	Y
019-0002	3	SLAMS	17.66	2.0	89.0	0	0	96	+0.03	100			Y	Y	Y	Y	Y
003-0014	1	SLAMS	19.22	2.0	80.0	0	0	91	+/-	0			Y	Y	N	Y	N

Submitter Comment: Flow Rate Audit Completeness 75% according to AMP250 EPA Comment:

Comment required if Cert Agency changes AQS Recommended Flag

Certification Form



Query Criteria

Year Agency County Code
State CBSA Code

Classification Parameter

Certifications

Year	AQS Monitor ID	AQS Recommended Flag	Monitoring Agency Request	EPA Evaluation Value	Monitoring Agency Comment
2012	001-0011-81102-2	Y	Y	Y	
2012	003-0014-81102-1	N	Y	N	Flow Rate Audit Completeness 75% according to AMP2
2012	003-1011-81102-2	Y	Y	M	
2012	005-0015-81102-2	Y	Y	Y	
2012	005-0015-81102-3	Y	Y	Y	
2012	009-0103-81102-2	Y	Y	Y	
2012	011-0016-81102-2	Y	Y	Y	
2012	019-0002-81102-3	Y	Y	Y	

Since the only qualifier that shows up in AQS is the EPA concurrence qualifier, any change in data by the Monitoring Organization will show up as "M" for modified

AMP 450 Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 QUICK LOOK REPORT (AMP450)

Jul. 23, 2014



Micrograms/cubic meter (25 C) (001)

ADDRESS	YEAR	METH	#OBS	NUM REQ	VALID DAYS	%OBS	1ST MAX	2ND MAX	3RD MAX	4TH MAX	DAY EST	WTD ARITH MEAN	CERT and EVAL	EDT	
											MAX >STD				DAYS >STD
[REDACTED]	2012	126	59	61	59	97	54	53	49	36	0	0	15.2	Y	0
[REDACTED]	2012	127	112	122	107	88	80	68	66	45	0	0	19.6*	N	0
[REDACTED]	2012	079	8547	366	355	97	100	98	84	79	0	0	16.1	M	0
[REDACTED]	2012	126	53	61	53	87	60	50	48	48	0	0	20.7*	Y	0
[REDACTED]	2012	126	28	30	28	93	62	47	45	37	0	0	19.9	Y	0
[REDACTED]	2012	127	117	122	117	96	19	17	16	15	0	0	6.2	Y	0
[REDACTED]	2012	126	56	61	56	92	61	48	35	27	0	0	13.8	Y	0
[REDACTED]	2012	127	59	61	59	97	89	55	40	38	0	0	17.6	Y	0

How the AMP600 Works Found On AMTIC



PQAO Level Flags

For Collocation and PEP, AQS Recommended flags are generated **at the PQAO level** and then “transferred” back to each site

PQAO Criteria Met for Collocation based on CV not completeness

PEP PQAO Criteria based on Bias estimate, not completeness

Certification Report for Particulate Matter

Certifying Year: 2012

Certifying Agency: [Redacted]

Parameter: PM2.5 - Local Conditions (88101)

PQAO Name: [Redacted]

Quality Assurance Project Plan Approval Date:

Collocation Summary

Method	# Sites	# Sites Req	# Sites Collocated	% Collocated	CV Est	CV UB	Criteria Met?
145	4	1	1	100	10.87	12.07	Y

PEP Summary

# Methods	# Audited Methods	# PEP Required	# PEP Submitted	% Complete	Bias	Criteria Met?
1	1	5	2	40	+5.41	Y

Monitors Summaries

AQS Site ID	POC Method	Monitor Type	Routine Data (ug/m3)						Flow Rate Audit		Collocation		PEP		Certification			
			Mean	Min	Max	Exceed. Count	Outlier Count	% Complete	Bias	% Complete	% Complete	PQAO Crit. Met	PQAO Crit. Met	QAPP Appr.	AQS Rec Value	Req Value	EPA Value	
[Redacted]	1	145	SLAMS	6.72	.8	16.7	0	87	+1.22	100			Y	Y	Y	Y		
	1	145	SLAMS	4.55	.6	18.1	0	93	+0.53	100			Y	Y	Y	Y		
	1	145	SLAMS	6.73	.4	19.9	0	92	+1.22	100	12.07	100	Y	Y	Y	Y		
	2	145	SLAMS	6.95	.8	17.7	0	90	+1.07	100			Y	Y	Y	Y		
	1	145	SLAMS	8.93	1.8	33.0	0	92	+0.75	100			Y	Y	Y	Y		

See “additional Information Related to AMP600 Certification Process” at <http://www.epa.gov/ttnamti1/qacert.html>

Certification Process: Thoughts and Steps Forward



- It works
 - It needs some refinement but not bad for first 2 years
- Use it often
 - Don't wait till May to run the report
 - It can run on a partial year based on the date the report is run. This may not be perfect but can help.
- By the time data is in AQS it may be to late
 - Internal QC is critical
- Will eventually add outlier statistics.