

## AMP255 – Data Quality Indicators Report

**New and Improved!!**

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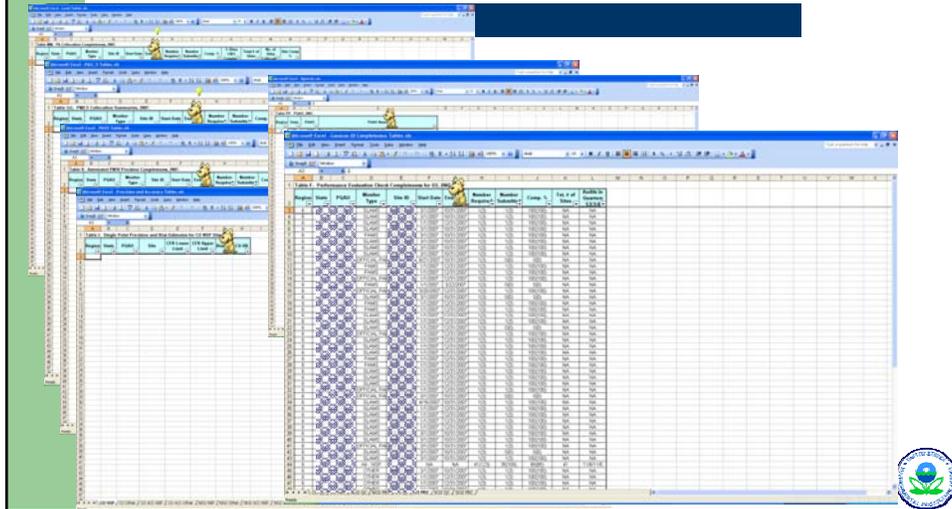


## AMP255 – What Is It?

- AQS Standard Report to Compute the Statistics Outlined in 40 CFR Part 58 Appendix A
- Used as Part of the Annual Certification Process to Verify Submission of QA Data to AQS



## “Old” AMP255 Example



## Why Change It?

- Suggested Changes from Users
  - Fewer Worksheets
  - “Nice” if Printable as PDF
- Programmatic Changes
  - Finalization of PM Rule
  - New Lead Requirements
  - Make Wording More Consistent w/ Appendix A
- Just Plain ‘ole Wrong Calculations



## New Features – Look and Feel

- Excel Version
  - One Workbook with 7 Worksheets
- Printable Version
- Column Labels and Report Sections Consistent with Appendix A
- Expanded “Read Me” File with Help on Field Meanings



## New Features – Corrected Calculations

- Full Requirements Review w/ Mike Papp
- Collection Changes
  - Calculated Now Based on Any Monitor
  - Deleted Data
  - Based on “Monitor
  - Precision and Bias Estimates Now C
- Changes
  - Samples within Range Now
  - Complex Completeness Requ



**Octorilla!!**



## New Features – Options & Grouping

- Select Only Monitors Where Appendix A is Applicable
  - Use of the “NON-REGULATORY” Monitor Type
  - Report Grouped by Applicability Indicator
- Select Data in a Defined Monitoring Season or Entire Year
- Data Grouped by Assessment Type - Pollutant – PQAQ – App A Indicator
  - Also grouped by Method for Collocated PM2.5 Summaries
  - Completeness and Evaluation Information Shown Together



## More on Grouping Differences

- Old AMP255
  - Region – State - PQAQ – Pollutant – Primary Monitor Type
- New AMP255
  - Pollutant – PQAQ – Pollutant – App A – Year – Sometimes Method
  - Data Summarized by Year if App A Says So
  - Data Summarized Across Years



## What Does it Look Like Now? 1-Point Quality Control Format

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
DATA QUALITY INDICATOR REPORT  
1-Point Quality Control

Pollutant: CO PGAD: 0194 (City of Dallas Air Pollution Control Section) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	#Flags	#Obs	Complete	CV	Bias
2006	06	TX	48-113-0009	2	O	31-JAN-06	31-DEC-06	26	34	100	1.71	0
<b>SUMMARY</b>												
2006	06	TX						26	34	100	1.71	0

Pollutant: CO PGAD: 0200 (City of Houston Health Department) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	#Flags	#Obs	Complete	CV	Bias
2006	06	TX	48-201-0047	1	S	31-JAN-06	31-DEC-06	26	32	100	1.96	+ 4.24
2006	06	TX	48-201-0075	1	S	31-JAN-06	31-DEC-06	26	100	100	1.60	+ 1.56
2006	06	TX	48-201-0416	1	SP	22-FEB-06	31-DEC-06	26	100	100	0.66	+ 3.74
2006	06	TX	48-201-1026	1	O	31-JAN-06	31-DEC-06	26	100	100	2.20	- 1.72
<b>SUMMARY</b>												
2006	06	TX						26	100	100	1.52	+ 1.56

Pollutant: CO PGAD: 0245 (Texas Commission on Environmental Quality) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	#Flags	#Obs	Complete	CV	Bias
2006	06	TX	48-141-0003	1	O	31-JAN-06	31-DEC-06	26	37	100	1.11	+ 1.25
2006	06	TX	48-141-0003	1	O	31-JAN-06	31-DEC-06	26	37	100	2.17	- 2.67
<b>SUMMARY</b>												
2006	06	TX						26	37	100	1.11	+ 1.25

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## What Does it Look Like Now? Annual PE Format

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
DATA QUALITY INDICATOR REPORT  
Annual Performance Evaluations

Pollutant: SO2 PGAD: 0194 (City of Dallas Air Pollution Control Section) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	Avg %D	Level	L1	L2	L3	L4	L5	Q1	Q2	Q3	Q4	Met	Lower	Upper	Cont. Limits	% Between	
2006	06	TX	48-113-0009	2	S-N	31-JAN-06	31-DEC-06	18.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUMMARY</b>																								
2006	06	TX						18.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pollutant: SO2 PGAD: 0200 (City of Houston Health Department) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	Avg %D	Level	L1	L2	L3	L4	L5	Q1	Q2	Q3	Q4	Met	Lower	Upper	Cont. Limits	% Between	
2006	06	TX	48-201-0048	1	O	31-JAN-06	31-DEC-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	06	TX	48-201-0051	2	O	31-JAN-06	31-DEC-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	06	TX	48-201-0062	1	O	31-JAN-06	31-DEC-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	06	TX	48-201-0416	1	SP	22-FEB-06	31-DEC-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	06	TX	48-201-1026	2	S-N	31-JAN-06	31-DEC-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUMMARY</b>																								
2006	06	TX						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pollutant: SO2 PGAD: 0245 (Texas Commission on Environmental Quality) App At: Yes

Year	Region	State	Site ID	POC	MT	Begin Date	End Date	Avg %D	Level	L1	L2	L3	L4	L5	Q1	Q2	Q3	Q4	Met	Lower	Upper	Cont. Limits	% Between	
2006	06	TX	48-141-0003	1	O	31-JAN-06	31-DEC-06	18.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	06	TX	48-141-0003	1	O	31-JAN-06	31-DEC-06	18.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUMMARY</b>																								
2006	06	TX						18.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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## What Does it Look Like Now? Collocation Information

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
DATA QUALITY INDICATOR REPORT  
Collocation Detail

Pollutant: PM10 PGAD: 0420 (Salveston City County Health Department)

Year	Method	Region	State	Site ID	Costs	POC	MT	Begin Date	End Date	#Obs	#Obs	% Complete	CY	App AT:
2006	06	TX	48-167-0004	#1102	1	S	01-JAN-06	31-DEC-06	30	30	100	4.44	Yes	
2007	06	TX	48-167-0004	#1102	1	S	01-JAN-07	31-DEC-07	30	30	100	6.02	Yes	
2008	06	TX	48-167-0004	#1102	1	S	01-JAN-08	31-DEC-08	30	30	100	6.02	Yes	

Pollutant: PM10 PGAD: 1020 (Texas Commission On Environmental Quality)

Year	Method	Region	State	Site ID	Costs	POC	MT	Begin Date	End Date	#Obs	#Obs	% Complete	CY	App AT:
2006	06	TX	48-201-1039	#1102	1	O	01-JAN-06	31-DEC-06	30	34	100	9.25	Yes	
2006	06	TX	48-395-0034	#1102	1	O	01-JAN-06	31-DEC-06	30	36	100	11.13	Yes	
2007	06	TX	48-113-0050	#1102	1	O	01-JAN-07	31-DEC-07	30	31	100	3.98	Yes	
2007	06	TX	40-14-0002	#1102	1	O	01-JAN-07	31-DEC-07	30	30	100	3.30	Yes	
2007	06	TX	48-201-1039	#1102	1	O	01-JAN-07	31-DEC-07	30	40	100	5.26	Yes	
2007	06	TX	48-201-1039	#1102	1	O	01-JAN-07	31-DEC-07	30	32	100	17.18	Yes	
2007	06	TX	48-395-0034	#1102	1	O	01-JAN-07	31-DEC-07	30	36	100	5.68	Yes	
2008	06	TX	48-113-0050	#1102	1	O	01-JAN-08	31-DEC-08	30	29	97	6.08	Yes	
2008	06	TX	48-395-0034	#1102	1	O	01-JAN-08	31-DEC-08	30	32	100	5.74	Yes	

Pollutant: PM2.5 PGAD: 1020 (Texas Commission On Environmental Quality)

Year	Method	Region	State	Site ID	Costs	POC	MT	Begin Date	End Date	#Obs	#Obs	% Complete	CY	App AT:
2006	06	TX	48-113-0050	#8101	1	S	01-JAN-06	07-MAR-06	30	39	100	20.66	Yes	
2006	06	TX	48-201-1039	#8101	1	S	01-JAN-06	31-DEC-06	30	38	100	3.91	Yes	
2006	06	TX	48-395-0034	#8101	1	S	01-JAN-06	31-DEC-06	30	41	100	6.13	Yes	
2006	06	TX	48-113-0050	#8101	1	S	14-APR-06	31-DEC-06	21	30	100	4.12	Yes	
2006	06	TX	48-395-0034	#8101	1	S	01-JAN-06	31-DEC-06	30	39	100	5.43	Yes	
2006	06	TX	48-113-0050	#8101	1	S	01-JAN-06	31-DEC-06	30	38	100	6.44	Yes	
2006	06	TX	48-201-1039	#8101	1	S	01-JAN-06	31-DEC-06	30	35	100	7.18	Yes	
2006	06	TX	48-395-0034	#8101	1	S	01-JAN-06	31-DEC-06	30	33	100	7.70	Yes	
2006	06	TX	48-439-1002	#8101	1	S	01-JAN-07	31-DEC-07	30	39	100	12.77	Yes	

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## What Does it Look Like Now? PEP Format

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
DATA QUALITY INDICATOR REPORT  
Performance Evaluation Program (PEP)

Pollutant: LEAD PGAD: 0196 (City of Dallas Air Pollution Control Section)

Year	Region	State	# Sites	# PEP	# PEP	# Collocated	# Collocated	%	Conf. Limits	App AT:
2006	06	TX	5	5	5	5	5	100	None	Yes
2006	06	TX	5	5	5	5	5	100	None	Yes

Pollutant: LEAD PGAD: 0339 (City of El Paso Air Quality Program)

Year	Region	State	# Sites	# PEP	# PEP	# Collocated	# Collocated	%	Conf. Limits	App AT:
2006	06	TX	0	0	0	0	0	0	None	Yes

Pollutant: LEAD PGAD: 1020 (Texas Commission On Environmental Quality)

Year	Region	State	# Sites	# PEP	# PEP	# Collocated	# Collocated	%	Conf. Limits	App AT:
2006	06	TX	8	8	8	8	8	100	None	Yes
2007	06	TX	8	8	8	8	8	100	None	Yes
2008	06	TX	8	8	8	8	8	100	None	Yes

Pollutant: PM2.5 PGAD: 1020 (Texas Commission On Environmental Quality)

Year	Region	State	# Sites	# PEP	# PEP	# Collocated	# Collocated	%	Conf. Limits	App AT:
2006	06	TX	31	31	31	31	31	100	+0.72 -0.94	Yes
2007	06	TX	31	31	31	31	31	100	+0.37 -0.63	Yes
2008	06	TX	31	31	31	31	31	100	+0.50 -0.76	Yes

Pollutant: PM2.5 PGAD: 1020 (Texas Commission On Environmental Quality)

Year	Region	State	# Sites	# PEP	# PEP	# Collocated	# Collocated	%	Conf. Limits	App AT:
2006	06	TX	2	2	2	2	2	100	+2.77 -5.94	Yes
2007	06	TX	2	2	2	2	2	100	+0.63 -1.43	Yes
2008	06	TX	2	2	2	2	2	100	+1.70 -3.42	Yes

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## What Does it Look Like Now? Filter Strip Data (Lead)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
DATA QUALITY INDICATOR REPORT  
Audit Strip Analysis

Pollutant: LEAD PGAO: 0196 (City of Dallas Air Pollution Control Section)

Year	Region	State	Lab	M	Q1	Q2	Q3	Q4	Year	Bias
2006	06	TX	0196	001	100	100	100	100	100	0.00
2007	06	TX	0196	001	100	100	100	100	100	0.00
2008	06	TX	0196	001	100	100	100	100	100	0.00
2009	06	TX	0196	001	100	100	100	100	100	0.00
2010	06	TX	0196	001	100	100	100	100	100	0.00

Pollutant: LEAD PGAO: 0305 (City of El Paso Air Quality Program)

Year	Region	State	Lab	M	Q1	Q2	Q3	Q4	Year	Bias
2006	08	TX	0305	001	100	100	100	100	100	0.00
2007	08	TX	0305	001	100	100	100	100	100	0.00
2008	08	TX	0305	001	100	100	100	100	100	0.00
2009	08	TX	0305	001	100	100	100	100	100	0.00
2010	08	TX	0305	001	100	100	100	100	100	0.00

Pollutant: LEAD PGAO: 1403 (Texas Commission on Environmental Quality)

Year	Region	State	Lab	M	Q1	Q2	Q3	Q4	Year	Bias
2006	08	TX	1403	001	100	100	100	100	100	0.00
2007	08	TX	1403	001	100	100	100	100	100	0.00
2008	08	TX	1403	001	100	100	100	100	100	0.00
2009	08	TX	1403	001	100	100	100	100	100	0.00
2010	08	TX	1403	001	100	100	100	100	100	0.00

App AT: Yes

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## What is Next?

- Complete Testing and Implementation
- Enhancements in the Excel Workbook
  - Add in Grouping Features
  - Add in Sorting Features
- Continue Expanding the Readme.txt File



## Take Home Messages from CS...

- Octarilla is Everywhere!!
  - Make Use of the Readme.txt
  - Take in All the Parts of the Information
  - Further Investigation May be Required

