Ohio Air Monitoring Network Plan 2015-2016 6/5/15

Requirements

As required by 40 CFR 58.10, Ohio EPA is providing an annual monitoring network plan for public review and comments. Ohio EPA will submit this plan with any comments received to the US EPA Region V Regional Administrator. There will be a 30 day comment period for the public to make comments on the plan and those comments will also be submitted to Region V. The Ohio Air Monitoring Network as it exists as of July 1, 2015 is included in the accompanying table.

Changes

The plan for Ohio's Air Monitoring Network for 2015-2016 is to make changes as required or necessary for the air monitoring network.

For sites that monitor for very fine particulate matter or $PM_{2.5}$, Ohio EPA expects to continue with monitoring or sampling using the $PM_{2.5}$ Federal Reference Method at most of the sites as they existed at the beginning of 2015. There may be changes that have to be made in the $PM_{2.5}$ network that are not listed in these plans. Such changes may occur as a result of construction or maintenance operations that are not known ahead of when they occur.

The ozone monitoring sites will have minimal changes for 2015 and 2016. Ohio's current ozone monitoring sites should be sufficient to cover current ozone monitoring requirements.

PM₁₀ sampling sites in Ohio will remain at approximately the current number of sites.

Unplanned site changes occur to the network each year. Changes or temporary interruptions of sampling may occur because of events such as building or roof maintenance, construction, change of ownership of the site or other changes at the site that require moving the instruments. Some changes that may not be planned could include adding sites for complaint areas or for a new or proposed facility. Other changes that are planned may not actually happen because a new site cannot be secured or because of budget constraints.

All site and parameter changes are made in consultation with and approval of the US EPA Region 5 air monitoring staff.

Guidance and Priorities

Ohio EPA follows the federal general guidance for air monitoring according to 40 CFR 58 Appendix D to monitor in areas of 1) expected high concentrations, 2) areas of high population density, 3) areas with significant sources, 4) general background concentration sites and 5) areas of regional transport of a pollutant. Not all air pollutants have sites for all of these categories.

In addition to the above guidance the Air Directors in the Region 5 states of Ohio, Michigan, Indiana, Illinois, Wisconsin and Minnesota have listed air monitoring objectives as:

- 1) Areas of high concentration and high population, provide timely air quality data to the public, support compliance with NAAQS and control strategy development and support air pollution research studies
- 2) Multi-pollutant monitoring such as the NCore sites
- 3) Source-oriented monitoring such as required monitoring for lead, nitrogen dioxide and sulfur dioxide
- 4) Rural monitoring and medium size city monitoring
- 5) Environmental justice monitoring
- 6) School air toxics monitoring

A fundamental consideration for all air monitoring projects and sites is that funding resources be available to operate and maintain the sites and equipment, to provide sample analyses and for data collection and reporting.

As of the time of publication of this list Ohio EPA plans to discontinue monitoring or has already discontinued monitoring at locations as shown and noted in the table at:

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3 lead sampling sites – Canton, MTAPCA and SEDO
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1 special purpose PM_{2.5} site - SWOAQA

3 VOC industrial sites – Portsmouth

4 PM_{2.5} chemical speciation, URG carbon sites discontinued at Columbus, Toledo Portsmouth and Youngstown.

Ohio EPA has moved, plans to move or started sites and instruments for:

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1 Akron SO<sub>2</sub> CO relocated to new site-Akron
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1 PM_{2.5}, Pb/metals site relocated to new site- CDO

1 PM_{2.5}, and 1 SO₂ new sites started in Middletown area-SWOAQA

2 PM₁₀, PM_{2.5}, Lead and VOC sites, may combine as one - SWOAQA

1 O₃ site relocated in Kinsman-MTAPCA

1 PM_{2.5}, PM_{2.5} chemical speciation, URG carbon site relocated from Dayton Library to Sinclair College-RAPCA

1 PM_{2.5} PM₁₀ site in Warren to relocate-MTAPCA

1 SO₂, O₃, NO₂, CO, PM_{2,5} Pb site to start in summer of 2015 Shadyside-SEDO

These plans are dependent upon securing adequate levels of funding to support existing monitoring and any changes to the air monitoring network. All of the plans are subject to approval by US EPA.

For questions about the Ohio Air Monitoring Network please contact: Gary Engler at 614-644-3623 or Dave Ambrose at 614-644-3620

Comments about the Ohio Air Monitoring Network may be emailed to:

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Address:

Ohio EPA Air Monitoring Section Division of Air Pollution Control P.O. Box 1049, 50 West Town St. Columbus, OH 43215

20015-2016 Ohio Air Monitoring Network

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
Akron	Medina								
39-103-0004	Chippawa, Ballash Rd.	41.0604	-81.9239	Ozone	U.V. Photometric	Continuous	Population	Urban	
				PM _{2.5} - FRM Seq.	Gravimetric	1 in 3 day	Population	Urban	
				PM _{2.5} Met One BAM	Beta attenuation	Continuous	Population	Urban	AQI, New BAM monitor
									Restarted Jan. 1, 2015
	Portage. Co.								
39-133-0002	531 Washington Ave. Ravenna	41.1644	-81.2352	PM _{2.5} Seq. FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
20 122 1001	1.50	11.100111	04.000.40.4						
39-133-1001	1570 Ravenna Rd., Kent	41.182466	-81.330486	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
	Summit Co.								
39-153-0014	177 S. Broadway St., Akron	41.079167	-81.5161	Wind speed/wind dir.					Ended 7/31/14.
20 152 0015	T I I I I I	41.052525	01.460056	DIA EDIAG GI	G	1: 21	B 1.1	27 . 11 . 1	
39-153-0017	East High Sch., Akron	41.063526	-81.468956	PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Population	Neighborhood	107
				PM _{2.5} BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI, restarted 1/1 2015
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Highest conc.	Neighborhood	
39-153-0020	800 Patterson Ave, Akron	41.106486	-81.503547	Ozone	U.V. Photometric	Continuous	Population	Urban	
				Carbon monoxide	Infrared	Continuous	Population	Neighborhood	
							•		
39-153-0022	177 S. Broadway, Akron	41.080266	-81.516228	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	Discontinued 10/31/2014
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	Relocated to -153-0025
39-153-0023	660 W. Exchange St., Akron	41.087956	-81.541611	PM _{2.5} Seq. FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
				Chemical speciation	Ion Chromatograph	1 in 6 day	SIP information		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
39-153-0025	199 S. Broadway, Akron	40.07914	-81.51627	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	Site started 2/11/2015.
37-133-0023	199 S. Bloadway, Akton	40.07714	-01.31027	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population Population	Neighborhood	starts in 2015.
				Wind speed/wind dir	Tuised Tuorescence	Continuous	ropulation	rteignoomood	starts in summer, 2015.
Canton	Stark Co.			and the second second					
39-151-0016	515 25 th St., Malone University	40.828052	-81.37833	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
	,			Wind speed/wind dir.	Propeller/vane		*		
39-151-0017	1220 Dealer Are Eine St.	40.78689	-81.39419	PM _{2.5} BGI FRMCol	Gravimetric	1:- 2 1	Highest conc.	Neighborhood	
39-131-001/	1330 Dueber Ave., Fire Station	40.78089	-01.39419			1 in 3 day	SIP information	neignbornood	
				Chemical speciation URG-3000	Ion Chromatograph Carbon speciation	1 in 6 day 1 in 6 day	SIP information		
					•				I 1 I I I - I 10/21/14
			<u> </u>	TSP – lead	ICP	1 in 6 day	Source-oriented	Ì	Low lead, ended 10/31/14

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
39-151-0020	420 Market Ave. Canton			Carbon monoxide	Infrared	Continuous	Population	Middle	
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	
39-151-0022	45 S. Wabash Ave., Brewster	40.712778	-81.5983	Ozone	U.V. Photometric	Continuous	Background	Urban	
39-151-4005	1175 W. Vine St., Alliance	40.93139	-81.123544	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	Site not moving.
TD-1-4-									
Toledo	Lucas Co.	41.662405	02 47506	G 16 1: :1	D 1 10	C ··	D 1.4	NT 1 1 1 1	DWEL :
39-095-0008	3040 York St., Toledo	41.663405	-83.47596	Sulfur dioxide	Pulsed fluorescent	Continuous	Population	Neighborhood	PWEI site
39-095-0024	348 Erie St., Toledo	41.644067	-83.54625	PM _{2.5} TEOM	Oscillating crystal	Continuous	Highest conc.	Neighborhood	AQI
37 073 0024	540 Elle St., Toledo	41.044007	03.54025	PM _{2.5} FRM Seq Colo	Gravimetric Gravimetric	1 in 3 day	Highest conc.	Neighborhood	7101
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				Wind speed/wind dir.	Propeller/vane				
					1				
39-095-0026	2550 Airport Highway	41.620633	-8364225	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	
				Chemical speciation	Ion Chromatograph	1 in 6 day			Ended Jan. 24, 2015.
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
39-095-0027	200 S. River Road, Waterville	41.494167	-83.718944	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
39-095-0028	3040 York St., Toledo	41.66225	-83.4783	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	
			00.00.00						
39-095-0034	306 N. Yondota, Low Service	41.675213	-83.30693	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-095-0081	2930 131 st St., Toledo	41.719483	-83.47515	W:	D				
39-093-0081	2930 131 St., Toledo	41./19483	-83.47515	Wind speed/wind dir.	Propeller/vane				
SWOAQA	Butler Co.								
39-017-0003	Verity HS, Bonita & St. John	39.49369	-84.3543	PM ₁₀	Gravimetric	1 in 6 day	Population	Neighborhood	
37-017-0003	Middletown	37.47307	-04.3343	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4 site likely to
	Middletown			VOCs	GC MS	1 in 12 day	1 opulation	reignoomood	relocated nearby in 2015
				1005	001/10	1 111 12 011			Torough Hearty III 2016
39-017-0004	Hamilton Fire House	39.38338	84.5443	Ozone	U.V. Photometric	Continuous	Population	Urban	
27 027 0001	Schuler & Bender Ave, Hamilt.	22.23000		220110	22 notomoure	Commissions	- opulation	310411	
	Z TILLET CO ZONGOT TT, C, TIMINIT.								
39-017-0015	3901 Lefferson, Middletown	39.49014	-84.3642	PM ₁₀	Gravimetric	1 in 6 day	Population	Neighborhood	Site ends at end of 2015.
	,			TSP lead-metals Colo	ICP MS	1 in 6 day	Population	Neighborhood	Monitors may be
									combined with 017-0003
39-017-0016	Sacred Heart School	39.33841	-84.5666	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Urban	
	400 Nilles Rd., Fairfield								POCs 1,4

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
SWOAQA	Cont'						3		
39-017-0018	Hook Field Airport, Middletwn	39.529444	-84.393453	Ozone	U.V. Photometric	Continuous	Population	Urban	
	F								
39-017-0019	Amanda School	39.478849	-84.407675	PM ₁₀ –Low Volume	Gravimetric	1 in 6 day	Source oriented	Neighborhood	
	1300 Oxford Rd., Middletown			PM _{2.5} FRM BGI (2)	Gravimetric	1 in 3 day	Source oriented	Neighborhood	POCs 1,4
	,			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Source oriented	Neighborhood	AQI
				Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	
				VOC	GC/MS	1 in 12 day	Source oriented	Neighborhood	
39-017-0020	3350 Yankee Rd., Middletown	39.472436	-84.394952	PM ₁₀ -low volume	Gravimetric	1 in 6 day	Source oriented	Neighborhood	
				PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Source oriented	Middle Scale	POCs 1,4
				PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Source oriented	Neighborhood	AQI
				Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	
				VOC					
39-017-0021	1491 Made Industrial Dr.	39.464718	-84.4037	Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	Began June, 2013
	Middletown								
39-017-0022	2214 V D.J. M:J.Jl-4	39.47869	-84.3971	DM DCLEDM CDM	Carrianataia	1:- 2 1	C	Neighborhood	Danier Est. 5, 2015
39-017-0022	3214 Yankee Rd., Middletown	39.47809	-84.39/1	PM _{2.5} BGI FRM SPM	Gravimetric	1 in 3 day	Source oriented	Neignbornood	Began Feb. 5, 2015
	Clermont Co.								
39-025-0022	2400 Clermont Drive, Batavia	39.0828	-84.1441	PM _{2.5} TEOM FDMS	Oscillating crystal	Continuous	Population	Neighborhood	AQI
37-023-0022	2400 Cicinont Brive, Batavia	37.0020	-04.1441	Ozone Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	7101
				Ozone	C. V. I notometre	Continuous	riighest cone.	CIBUII	
	Hamilton Co.								
39-061-0006	11590 Grooms Rd.,Sycamore	39.2787	-84.366192	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4
				PM _{2.5} Thermo Sharp	Beta Attenuation	Continuous	Population	Neighborhood	May get Thermo 5030
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
-									
39-061-0010	Colerain, 6950 Ripple Rd.	39.21487	-84.69086	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
	Cleves			Ozone	U.V. Photometric	Continuous	Population	Urban	
				PM _{2.5} Met One BAM	Beta Attenuation	Continuous	Population	Neighborhood	AQI
				PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4
				-					
39-061-0014	Carthage Fire House	39.19433	-84.47898	PM ₂₁₀	Gravimetric	1 in 6 day	Highest conc.	Middle	
	Seymour &Vine, Cincinnati			PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Population	Neighborhood	
				VOCs	GC MS	1 in 12 day	Population	Neighborhood	

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
SWOAQA	Cont'				· ·				
39-061-0040	250 Taft Rd. Cincinnati	39.123841	-84.504011	PM ₁₀ low-vol Pb colo	x-ray defraction	1 in 6 day	Population	Neighborhood	
				PM ₁₀ TEOM FDMS	Oscillating crystal	Continuous	Population	Neighborhood	PM10 AQI
				PM _{2.5} FRM BGI colo	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM _{2.510-2.5} FRM colo	Gravimetric	1 in 3 day	Population	Neighborhood	NCore
				PM _{2.5} BAM	Beta Attenuation	Continuous	Population	Neighborhood	AQI
				Chemical Speciation	Ion Chromatograph	1 in 3 day	SIP info		
				URG-3000	Carbon speciation	1 in 3 day	SIP info		
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				NO_2	Chemiluminescence	Continuous	Population	Neighborhood	
				WS/WD Met	Sonic	Continuous			
				Haze camera					Discontinued
				Sulfur dioxide-trace	Pulsed Fluorescence	Continuous	Population	Neighborhood	NCore
				Carbon monoxide	Infrared	Continuous	Population	Middle	NCore
				NOy trace	Chemiluminescence	Continuous	Population	Neighborhood	NCore
39-061-0042	Lower Price Hill, 8 th St. Cinti	39.10492	-84.55117	PM _{2.5} FRM BGI (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4
39-061-0047	Kibby Lane	39.131635	-84.707205	VOC	GCMS	1 in 6 day	High. Conc.	Neighborhood	
39-061-0048	Near-road NO2 site	39.146025	-84.538375	NO ₂	Chemiluminescence	Continuous	High Conc.	Microscale	New Near-road NO2
37-001-00-0	Trear-Todd Troz site	37.140023	-04.330373	PM _{2.5} FRM BGI	Gravimetric	1 in 3 day	High Conc.	Microscale	SP, ended 12/14
				CO	Infrared	Continuous	High Conc.	Microscale	51 , chaca 12/14
				Black Carbon	minarca	Continuous	High Conc.	Microscale	
				WS/WD Met	Sonic	Continuous	Tilgii Colic.	Wheroseare	
39-061-5001	Wyoming & Cooper, Lockland	39.226729	-84.453978	PM ₁₀ –Colo	Gravimetric	1 in 6 day	Population	Neighborhood	
	Warren Co.								
39-165-0007	416 Southeast St., Lebanon	39.42693	-84.2006	PM _{2.5} BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
	,			Ozone	U.V. Photometric	Continuous	Max ozone	Urban	

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
Cleveland	Cuyahoga Co.				J		3		
39-035-0034	891 E. 152 St.	41.55523	-81.575256	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Highest conc.	Urban	
	Cleveland			Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
							•	- C	
39-035-0038	St. Theodosius, St. Tikon St.	41.477011	-81.682383	PM ₁₀ (5)	Gravimetric	1 in 1 day	Highest conc.	Neighborhood	POCs 1,4,6,7,8
	Cleveland			PM _{2,5} FRM Seq Colo	Gravimetric	1 in 3 day	Population	Neighborhood	
				TSP lead-metals	ICP	1 in 6 day	Highest conc.	Neighborhood	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Highest conc.	Neighborhood	
				Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP info		
				VOCs	GC MS	1 in 12 day			
39-035-0042	Fire Station 4, 3136 Lorain	41.4823	-81.708906	TSP Pb\metals Colo	ICP	1 in 6 day	Highest conc.	Middle	
39-035-0045	FS 13, 4950 Broadway Ave.	41.471782	-81.656792	PM ₁₀ Colo	Gravimetric	1 in 6 day	Population	Neighborhood	
	Cleveland			PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
	,								
39-035-0049	Ferro Corp. E. 56 th St.	41.446342	-81.6507	TSP-leadmetals Colo	ICP	1 in 6 day	Highest conc.	Neighborhood	
	Cleveland								
39-035-0051	Galleria, E. Ninth & St. Clair	41.504661	-81.690186	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	
	Cleveland								
20.025.0060	cm c : E + th o o	41 400117	01.670440	73.6	G	1 1	B 1.1	N. 11 1 1	
39-035-0060	GT Craig, E. 14 th & Orange	41.492117	-81.678449	PM ₁₀	Gravimetric	1 in 6 day	Population	Neighborhood	
	Cleveland			PM ₁₀ TEOM	Oscillating crystal	Continuous	D 1.1	Neighborhood	
				PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	101
				PM _{2.5} MetOne BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
				PM _{2.5} Spec. Colo	Ion Chromatograph	1 in 3 day	SIP info		
				URG-3000	Carbon speciation	1 in 6 day	SIP information	NT 1 1 1 1 1	
				TSP lead-metals	ICP	1 in 6 day	Highest conc.	Neighborhood	
		1		Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
		+	1	NO ₂	Chemiluminescence	Continuous	Population	Neighborhood	NC
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	NCore
		+	1	Sulfur dioxide-trace	Pulsed Fluorescence	Continuous	Population	Neighborhood	NCore
		+	1	NOy	Chemiluminescence	Continuous	Population	Neighborhood	NCore
		+	1	CO-trace	Carbon monoxide	Infrared	Population	Neighborhood	NCore NCore
		+		PM ₁₀ local	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM _{10-2.5}	Gravimetric	1 in 6 day	Population	Neighborhood	NCore
				l			L		1

AQS ID#				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
CLEVE cont'									
39-035-0061	South side W. 3 rd St. Cleveland	41.473092	-81.676596	TSP-lead-metals	ICP	1 in 6 day	Source-oriented	Middle	
39-035-0064	390 Fair St. Berea BOE	41.36189	-81.864608	Ozone	U.V. Photometric	Continuous	Highest conc.	Neighborhood	
20.025.0055	4600 17	41.446602	01.662410	D) (1	TT' 1	X . 11 1 1	0.001; 14, 20
39-035-0065	4600 Harvard Ave., Newburgh	41.446682	-81.662419	PM ₁₀	Gravimetric	1 in 6 day	Highest conc.	Neighborhood	Off line May 28
				PM _{2.5} FRM Seq.	Gravimetric Pulsed Fluorescence	1 in 3 day	Population	Neighborhood	Will get new trailer
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Highest conc.	Neighborhood	
39-035-0069	Fire Station #22, Superior Ave.	41.519003	-81.637734	VOCs	GC MS	1 in 12 day			Maybe resumes sampling
	Cleveland					j			, , ,
39-035-0072	26565 Miles Rd., Warrensville	41.42585	-81.49078	TSP-Lead	ICP	1 in 6 day	Source oriented	Neighborhood	Site may end in 2015.
39-035-0073	25609 Emory Rd.	41.4409	-81.4949	NO ₂	Chemiluminescence	Continuous	High conc.	Microscale	New Near-road NO2 site
	Warrensville Hts.			CO	Infrared	Continuous	High. Conc.	Middle scale	Started 8/1/2014
				WS\WD	Sonic	Continuous			Started 7/24/2014
									Will add PM2.5
39-035-1002	16900 Holland Road	41.39629	-81.818667	PM ₁₀	Gravimetric	1 in 6 day	Population	Neighborhood	
	Brookpark			PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	
				VOCs	GC MS	1 in 12 day			
39-035-5002	6116 Wilson Road, Mayfield	41.537344	-81.458834	Ozone	U.V. Photometric	Continuous	Population	Urban	
D. D.C.									
RAPCA	Clark Co.	40.00102	02.00456		TIM DI	G i	TT' 1	TT 1	
39-023-0001	5171 Urbana Rd., Springfield	40.00103	-83.80456	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-023-0003	5400 Spangler Rd., Enon	39.85567	-83.99773	Ozone	U.V. Photometric	Continuous	Highest conc.	Neighborhood	
	1 0			Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
39-023-0005	350 N. Fountain Rd.,	39.928820	-83.80949	PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	
	Springfield			PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1, 4
	Greene Co.								
39-057-0005	100 Dayton Rd.,	39.80834	-83.88705	PM_{10}	Gravimetric	1 in 6 day	Population	Neighborhood	
	Yellow Springs			PM _{2.5} BGI colo (2)	Gravimetric	1in 3 day	Population	Neighborhood	POCs 1,2,4
	1 5			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	Combine with 017-0020
30 057 0006	541 Ledbetter Rd., Xenia	39.66575	-83.94285	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-057-0006	541 Leabetter Ru., Aeiila	39.00373	-03.94203	Ozone	U.v. Photometric	Continuous	righest conc.	Orban	

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
RAPCA cont'	•				•		"		
	Miami Co.								
39-109-0005	3825 N. Rt. 589, Castown	40.08455	-84.11412	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
	Montgomery Co								
39-113-0032	215 E. 3 rd St., Dayton Library	39.760659	-84.187678	PM _{2.5} FRM -Colo	Gravimetric	1 in 3 day	Population	Neighborhood	Site ended 9/24/2014
	, ,			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	Relocated to Sinclair
39-113-0032	215 E. 3 rd St., Dayton Library			Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP information		Community College,
	,			URG-3000	Carbon speciation	1 in 6 day	SIP information		39-113-0038
					•	j			
39-113-0034	117 S. Main St., Dayton	39.757837	-84.191667	Carbon monoxide	Infrared	Continuous	Highest conc	Microscale	
	, ,						Č		
39-113-0037	1401Harshman Rd., Dayton	39.7863	-84.1337	Ozone	U.V. Photometric	Continuous	Population	Urban	
	, ,						•		
39-113-0038	Sinclair Community College	39.7560	-84.1987	PM _{2.5} FRM SeqColo	Gravimetric	1 in 3 day	Population	Neighborhood	Site started 10/1/2014
	444 W. Third St., Dayton			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	
				Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP information		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
39-113-7001	2728 Viking Lane, Moraine	39.71451	-84.21798	PM ₁₀ –Colo	Gravimetric	1 in 6 day	Highest conc	Neighborhood	
				TSP-Pb,metals-Colo	ICP	1 in 6 day	Source oriented	Neighborhood	
	Preble Co.								
39-135-1001	National Trail School	39.8362	-84.72049	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Upwind backgd.	Regional	
	6940 Oxford Gettysburg Rd.			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Upwind backgd.	Urban	
	St. Rt. 40, New Paris			Ozone	U.V. Photometric	Continuous	Upwind backgd.	Regional	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Upwind backgd.	Regional	NCore
				Carbon monoxide	Infrared	Continuous	Upwind backgd.	Regional	NCore
				NOy	Chemiluminescence	Continuous	Upwind backgd.	Regional	NCore
				NO-trace	Chemiluminescence	Continuous	Upwind backgd.	Regional	NCore
				PM _{10-2.5} Coarse	Gravimetric	1 in 3 day	Upwind backgd.	Regional	NCore
				PM ₁₀ – LC-colo	Gravimetric	1 in 3 day	Upwind backgd.	Regional	NCore
				URG-3000	Carbon speciation	1 in 6 day	Upwind backgd.	Regional	NCore
				Chemical Speciation	Ion Chromatograph	1 in 6 day	Upwind backgd.	Regional	NCore
				WSpeed/WDir		Continuous			NCore
MTAPCA	Mahoning Co.								
39-099-0005	Elm & Madison, Fire Station #7	41.111111	-80.645278	DM	Grazimatria	1 in 6 days	Population	Neighborhood	
39-099-0003	Emi & Madison, Fire Station #/	41.111111	-80.045278	PM ₁₀	Gravimetric	1 in 6 day	•		
				PM _{2.5} FRM BGIColo	Gravimetric	1 in 6 day	Population	Neighborhood	
39-099-0006	Superior & Oakland, Fire St. 5	41.116667	-80.669722	PM ₁₀ -colo	Gravimetric	1 in 6 day	Population	Neighborhood	

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
	Mahoning Co.								
39-099-0013	345 Oakhill Ave. Youngstown	41.096142	-80.65852	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
39-099-0014	345 Oakhill Ave. Youngstown	41.095938	-80.658467	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4 started 7/19/14
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI
				Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP info		ended 1/24/2015
				URG-3000	Carbon speciation	1 in 6 day	SIP information		ended 1/24/2015
	Trumbull Co.				•	_			
39-155-0005	540 Laird Ave., Warren	41.231167	-80.801914	PM ₁₀ -Colo	Gravimetric	1 in 6 day	Source-oriented	Middle	Site moving nearby soon.
				PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 day	Population	Neighborhood	POCs 1,4
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI
							•		
39-155-0006	Warren Water Treatment Plant	41.202237	-80.810644	PM_{10}	Gravimetric	1 in 6 day	Population	Neighborhood	
				10		,	•		
39-155-0009	Kinsman Township Ad. Bldg,	41.454235	-80.591036	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	Site ended 10/31/2014
	6425 SR 87, Kinsman								
39-155-0011	St. Rt. 193, Vienna, TCSEG	41.240456	-80.662759	Ozone	U.V. Photometric	Continuous	Reg. transport	Urban	
							8		
39-155-0012	2600 Elmwood Dr., Hubbard	41.17279	-80.55572	TSP-Lead Colo	ICP	1 in 6 day	Source oriented	Urban	Low lead concentrations
	, , , , , , , , , , , , , , , , , , , ,								Site ended 1/31/2014.
39-155-0013	6380 SR 87, Kinsman Twnshp	41.454546	-80.58805	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	Site started 4/1/2015
	Maintenance Bldg., Kinsman						8		replaced 39-155-0009.
									1
Lake LAA	Geauga Co.								
39-055-0004	Notre Dame School, Munson	41.51551	-81.249906	Ozone	U.V. Photometric	Continuous	Population	Urban	
37 033 0001	Trotte Buille Bellooi, Wallson	11.51551	01.219900	Ozone	C. V. I notometre	Continuous	1 opulation	Cibun	
	Lake Co.								
39-085-0003	Jefferson School, Eastlake	41.673006	-81.422455	Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Neighborhood	
37 003 0003	Jerrerson Benoor, Eastrake	41.073000	01.422433	Ozone	U.V. Photometric	Continuous	Highest conc.	Neighborhood	
				Ozone	C. V. I notometre	Continuous	Tilghest cone.	rteighborhood	
39-085-0006	8443 Mentor Ave., Mentor	41.666886	-81.338781	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	
37-003-0000	OTTO MEMOI AVE., MEMOI	-1.000000	31.330781	Curoni monoxide	IIIIaica	Continuous	Tilgilest colle.	Microscare	
39-085-0007	177 Main St., Painesville	41.726811	-81.242156	PM _{2.5} FRM Seq Colo	Gravimetric	1 in 3 day	Highest conc.	Urban	
37 003-0001	177 Main St., 1 amesvine	71.720011	01.272130	PM _{2.5} TEOM FDMS	Oscillating crystal	Continuous	Highest conc.	Urban	AQI
		 		Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Middle	1171
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-085-1001	Fairport High School, Fairport	41.75489	-81.273076	PM ₁₀ -Colo	Gravimetric	1 in 6 day	Highest conc.	Neighborhood	Complaint area
37-003-1001	ranport riigii school, ranport	71./3407	-01.273070	1 14110-CO10	Gravillienic	1 III O day	riighest conc.	racigiloomood	Complaint area

AQS ID#				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
Portsmouth	Adams Co.								
39-001-0001	Adams County Hospital	38.794667	-83.533988	PM _{2.5} TA-BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
	210 N. Wilson Dr., West Union			Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
	Lawrence Co.								
39-087-0011	St. Rt. 141, Wilgus	38.62901	-82.45896	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
	_								
39-087-0012	ODOT Garage, Commerce Dr.	38.5081	-82.65924	PM_{10}	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM _{2.5} TA-BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
				Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP information		Ended 1/24/2015.
				URG-3000	Carbon speciation	1 in 6 day	SIP information		Ended 1/24/2015.
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
	Scioto Co.								
39-145-0013	Portsmouth Water Treat. Ports.	38.754595	-82.917	PM ₁₀ -Colo	Gravimetric	1 in 6 day	Highest conc.	Middle	
				PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Highest conc.	Middle	
39-145-0019	Portsmouth City Annex, Ports	38.735056	-82.998726	PM_{10}	Gravimetric	1 in 6 day	Population	Neighborhood	
39-145-0020	2840 Back Rd.,	38.609338	-82.822512	PM ₁₀ TEOM	Oscillating crystal	Continuous	Background	Neighborhood	Required by permit
	Franklin Furnace			Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	Required by permit
				VOCs	GC-MS	1 in 12 day			Ended 6/30/2014
39-145-0021	2446 Gallia Pike,	38.600611	-82.829782	PM ₁₀ TEOM	Oscillating crystal	Continuous	Source-oriented	Neighborhood	Required by permit
	Franklin Furnace			VOCs	GC-MS	1 in 12 day			Ended 6/30/2014
39-145-0022	1740 Gallia Pike,	38.588034	-82.834973	PM ₁₀ TEOM	Oscillating crystal	Continuous	Source-oriented	Neighborhood	Required by permit
	Franklin Furnace			Sulfur dioxide	Pulsed Fluorescence	Continuous	Background	Neighborhood	Required by permit
				VOCs	GC-MS	1 in 12 day			Ended 6/30/2014
					-				
CDO	Delaware Co.								
39-041-0002	359 Main Rd., Delaware	40.356694	-83.063971	Ozone	U.V. Photometric	Continuous	Population	Urban	
	Franklin Co.								
39-049-0005	1585 Morse Rd., Columbus	40.060124	-82.976857	Carbon Monoxide	Infrared	Continuous	Highest conc.	Middle	

AQS ID#				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
CDO cont'	Franklin Co. cont'								
39-049-0024	State Fairgrounds	39.99875	-82.99344	PM ₁₀ -Colo	Gravimetric	1 in 6 day	Highest conc.	Neighborhood	
	Columbus			PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Population	Neighborhood	
39-049-0025	Ann St. Swimming Pool	39.92843	-82.98098	PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	Ended 8/15/2014
	580 E. Woodrow, Columbus			TSP-lead-metals	ICP			Neighborhood	Relocatd to 39-049-0039
39-049-0029	New Albany HS, New Albany	40.0845	-82.81552	PM _{2.5} BAM	Oscillating crystal	Continuous	Population	Neighborhood	AQI
				Ozone	U.V. Photometric	Continuous	Highest conc.	Neighborhood	
39-049-0034	State Fairgrounds	40.002734	-82.994404	PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI
37-047-0034	Korbel Ave., Columbus	40.002734	-02.774404	VOCs	GC MS	1 in 12 day	Торишноп	reignoomood	7101
	11010011110., Columbus			Sulfur dioxide	Pulsed Fluorescence	Continuous	Population		PWEI site
39-049-0037	Franklin Park, Broad St., Col.	39.96523	-82.95549	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				NO ₂	Chemiluminescence	Continuous	Population	Neighborhood	
39-049-0038	Columbus Near Rd. NO ₂ site	40.1111	-83.06545	NO ₂	Chemiluminescence	Continuous	Highest conc.	Microscale	Adding black carbon,
	7560 Smoky Row Rd.			Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	PM _{2.5} summer of 2015.
39-049-0039	Barack Recreation Center	39.92853	-82.98011	PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	Started 10/1/2014
	580 E. Woodrow, Columbus			TSP-lead-metals	ICP			Neighborhood	mons. from 39-049-0025
39-049-0081	Fire Station, Maple Canyon	40.0877	-82.959773	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
	Columbus			PM _{2.5} FRM Seq.	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	
				Chemical speciation URG-3000	Ion Chromatograph Carbon speciation	1 in 6 day 1 in 6 day	SIP information		Ended 1/24/2015 Ended 1/24/2015
						5 443			
20.002.000	Knox Co.	40.04000-	00 101 50 :						
39-083-0002	Water Plant , Centerburg	40.310025	-82.691724	Ozone	U.V. Photometric	Continuous	Population	Urban	
	Licking Co.								
39-089-0005	Heath School, Heath	40.026037	-82.433	Ozone	U.V. Photometric	Continuous	Population	Urban	
	Madison Co.								
39-097-0007	Madison High School, London	39.78819	-83.47606	Ozone	U.V. Photometric	Continuous	Population	Urban	

AQS ID#				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
NEDO	Ashtabula Co.								
39-007-1001	Conneaut Water Plt., Conneaut	41.959695	-80.572808	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Urban	
				Ozone	U.V. Photometric	Continuous	Population	Urban	
	Columbiana Co.								
39-029-0019	Columbiana Port Authority,	40.631545	-80.547181	TSP-lead-metals	ICP	1 in 6 day	Population	Neighborhood	
	East Liverpool			Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Microscale	From -029-0022, 7/13
39-029-0020	Water Treat. Plant,	40.639595	-80.524019	TSP-lead-metals	ICP	1 in 6 day	Population	Neighborhood	
	East Liverpool			PM_{10}	Gravimetric	1 in 6 day	Population	Microscale	
	•			Wind speed/direction	Sonic		•		
39-029-0022	500 Maryland Ave.,	40.635275	-80.546642	TSP-Pb/metals-Colo	ICP	1 in 6 day	Population	Microscale	
2, 02, 0022	East Liverpool	.3.035273	30.5 10042	PM ₁₀ Colocated	Gravimetric	1 in 6 day	Population	Microscale	
	Lorain Co.			Tivi _{l0} Colocated	Gravimeure	1 III o day	Горинион	Wileroseare	
39-093-0018	Fire Station, Sheffield	41.420882	-82.095729	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
20,002,2002	D C 1 1 C1 CC 11	41.462071	01.114061	D) (g : .:	1: 61			
39-093-3002	Barr School, Sheffield	41.463071	-81.114261	PM ₁₀	Gravimetric	1 in 6 day	G : . 1	NT ' 11 1 1	
				PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Source-oriented	Neighborhood	101
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Source-oriented	Neighborhood	AQI
				Chemical Speciation	Ion Chromatograph	1: (1	CID; C		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
NWDO	Allen Co.								
39-003-0009	Bath High. School, Lima	40.770944	-84.0539	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Urban	
27 002 0007	Dum High Street, Dim	101770711	0.10005	Ozone	U.V. Photometric	Continuous	Population	Urban	
				PM _{2.5} FRM BGIcolo	Gravimetric	1 in 6 day	Population	Neighborhood	Colo started Apr. 2014
				PM _{2.5} TEOM FDMS	Oscillating crystal	Continuous	AQI	Neighborhood	r
	Fulton Co.								
39-051-0001	200 Van Buren St., Delta	41.57588	-83.9959	TSP-PB\metals Colo	ICP	1 in 6 day	Highest conc.	Microscale	
						-			
00 101 7777	Marion Co.		00.1555	man I I	. con	1			1
39-101-0003	Nucor Steel, Hawthorne Ave.	42.57141	-83.13556	TSP-lead	ICP	1 in 6 day	Source-oriented	Neighborhood	Marion
39-101-0004	640 Bellefontaine Ave.	40.57666	-83.14024	TSP-lead-metals	ICP	1 in 6 day	Source-oriented	Neighborhood	Marion
	Ottawa Co.								
39-123-0014	Materion, Elmore	41.494722	-83.214444	TSP – beryllium	ICP	7daysample	Source-oriented	Neighborhood	Brush-Wellman
	,			Ĭ					
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AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
NWDO cont'	Wood Co.								
39-173-0003	NWDO Office, Bowling Green	41.377685	-83.611104	Ozone	U.V. Photometric	Continuous	Other	Urban	
SEDO	Athens Co.								
39-009-0003	St. Rt. 377, Gifford Forest	39.442165	-81.908827	PM _{2.5} FRM BGI colo	Gravimetric	1 in 6 day	Background	Regional	Background PM _{2.5} site
	,			2.0					2.5
	Belmont Co.								
39-013-3002	E. 40 th St. Shadyside Treatment	39.96862	-80.7449	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	To move to 39-013-0006
	•								
39-013- 0006	2 Ball Park Rd, Shadyside	39.9679	-80.7464	Sulfur dioxide	Pulsed Fluorescence	Continuous	Background	Neighborhood	New site started in June.
				NO_2	Chemiluminescence	Continuous	Background	Neighborhood	PSD monitoring of
				Carbon Monoxide	Infrared	Continuous	Background	Neighborhood	future plant.
				PM _{2.5} FRM Seq.	Gravimetric	1 in 6 day	Background	Neighborhood	
				Pb/metals	Gravimetric	1 in 6 day	Background	Neighborhood	
				PM ₁₀	Gravimetric	1 in 6 day	Background	Neighborhood	
				Meteorological		Continuous	Ü		
	Jefferson Co.								
39-081-0001	1004 3 rd St., Brilliant	40.26157	-80.6335	PM_{10}	Gravimetric	1 in 6 day	Population	Neighborhood	
39-081-0017	618 Logan St., Steubenville	40.36644	-80.6158	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
				PM ₁₀ -colo	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 day	Population	Neighborhood	Collocated began 4/1/13
				PM _{2.5} BAM	Beta attenuation	Continuous	AQI	Neighborhood	
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				URG-3000	Carbon speciation	1 in 6 day	SIP information		From 39-081-1001
				Chemical Speciation	Ion Chromatograph	1 in 6 day	SIP info		From 39-081-1001
				VOCs	GC MS	1 in 12 day			From 39-081-1001
39-081-0021	110 Stueben, Mingo Junction	39.31951	-81.688	PM _{2.5} FRM BGI (2)	Gravimetric	1 in 3 day			POCs 1,4
									Went 1 in 3 day 1/1/15
39-081-0018	3487 Cnty Rd. 19, Brilliant	40.272	-80.62962	Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-Oriented		AEP Cardinal Power Plt
39-081-0019	Landfill Access Rd., Brilliant	40.26786	-80.64986	Wind Speed/Dir.	Sonic	Continuous	Source-Oriented		AEP Cardinal Power Plt
39-081-0020	1469 Third St., Brilliant	40.259475	-80.639987	Wind Speed/Dir.	Sonic	Continuous	Source-Oriented		AEP Cardinal Power Plt
				Sulfur dioxide	Pulsed Fluorescence	Continuous			
	Meigs Co.								
39-105-0003	117 Memorial Dr., Pomeroy	39.03849	-82.0459	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Urban	

AQS ID #				Parameter/			Monitoring	Spatial	
Air Agency	County/Address	Latitude	Longitude	Method	Analysis	Schedule	Objective	Scale	Comments
SEDO cont'	Morgan Co.								
39-115-0004	St. Rt. 83, Hackney	39.63223	-81.67005	Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Urban	Musk.River power plant
	Washington Co.								
39-167-0004	2000 4 th St. Marietta WTP	39.432117	-81.460443	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
39-167-0008	SR 676Washington Car. Ctr.	39.43147	-81.50131	TSP-lead metals	ICP	I in 6 day	Population	Urban	Colo. Starting in 2015. ?
39-167-0010	Ohio Valley Educa. Center	39.41365	-81.4703	TSP-Pb\metals-colo	ICP	I in 6 day	Population	Neighborhood	Site ended 6/30/2014
West Virginia	Wood County								
54-009-0003	SR 2, Beech Bottom WVA	40.29167	-80.60917	Wind Speed/Dir.	Sonic	Continuous	Source-Oriented		AEP Cardinal Power Plt
				Sulfur dioxide	Pulsed Fluorescence	Continuous			
SWDO	Clinton Co.								
39-027-1002	Laurel Oaks Sch., Wilmington	39.430000	-83.788611	Ozone	U.V. Photometric	Continuous	Population	Urban	
	Logan Co.								
39-091-0006	320Richard Ave., Bellefontaine	40.341467	-83.7585	TSP-lead-metals	ICP	1 in 6 day	Highest conc.	Neighborhood	Low lead concentrations

Notes/Explanations:

AQS is the Air Quality System maintained by US EPA for air quality data. In the AQS ID# the first 2 digits refer to the state. 39 is Ohio. The next 3 digits are the county within Ohio. The last 4 digits designate a specific site within the county.

All $PM_{2.5}$ Sequential FRM sites and single-event FRM sites are comparable to the $PM_{2.5}$ NAAQS. No continuous $PM_{2.5}$ monitors are to be comparable to the $PM_{2.5}$ NAAQS.

All Ozone sites are comparable to the NAAQS.

All sulfur dioxide, carbon monoxide and nitrogen dioxide sites are comparable to the NAAQS.

PM is Particulate Matter. PM_{10} means particulate matter of 10 microns in diameter or smaller. A micron is one millionth of a meter. $PM_{2.5}$ is particulate matter 2.5 millionths of a meter in diameter or smaller. PM_{10} is fine particulate matter and $PM_{2.5}$ is very fine particulate matter.

Monitoring instruments used for comparing to the National Ambient Air Quality Standards are designated as Federal Reference Methods (FRM) or Equivalent Methods.

PM_{2.5} Seq. FRM samplers test for PM_{2.5} and can hold multiple samples for <u>Sequential</u> sampling. They are <u>Federal Reference Method</u> (FRM).

Colocated or colo indicates a site with duplicate samplers for Quality Assurance purposes. Data is statistically compared from the two samplers for the same days. Duplicate samplers may sample at a 1 in 6 day schedule or possibly at a 1 in 12 day schedule.

Chem. Speciation sites are sites and samplers that collect $PM_{2.5}$ samples that are analyzed for the chemical speciation make-up of the $PM_{2.5}$ particulate matter.

U.V. Photometric indicates ultra-violet photometric, a method of detection for ozone concentrations.

U.V. fluorescence indicates ultra-violet fluorescence, a method of detection for sulfur dioxide concentrations.

VOCs are Volatile Organic Compounds. The method of collecting and analyzing whole air samples for VOCs in Ohio is TO-15. The collection utilizes a stainless steel canister for air sample collection in the field followed by analysis by gas chromatograph -mass spectrometer in a laboratory. There are approximately 72 compounds scanned for in the analysis.

TSP – metals is the method of collecting <u>Total Suspended Particulate</u> by drawing an air sample through a filter media that is analyzed at a laboratory for airborne metals including lead, arsenic, cadmium, chromium, nickel, zinc, manganese and beryllium and sometimes particulate mercury. Analysis is by ICP or <u>Inductively Coupled Plasma Emission Spectroscopy</u> or Graphic Furnace Atomic Absorption.

BAM indicates a Beta Attenuation Monitor, a method of detection for very fine particulates.

TEOM indicates a Tapered Element Oscillating Microbalance, a method of detection for very fine particulates.

SIP is State Implementation Plan that details how the state will implement controls that will bring the area into attainment status for a particular National Ambient Air Quality Standard. Chemical speciation sampling and analysis for $PM_{2.5}$ aids helps to determine what control measures and plans will best control fine particulates.

Ohio Air Monitoring Agencies

Akron Regional Air Quality Management District	City of Toledo			
Fairway Center	Division of Environmental Services			
1867 W. Market St.	348 South Erie St.			
Akron, Ohio 44308	Toledo, Ohio 43604			
(330) 375-2480	(419) 936-3015			
Medina, Portage, Summit counties	Lucas County			

Air Pollution Control Division	Mahoning-Trumbull APC Agency				
Canton City Health Department	345 Oak Hill Ave.				
420 Market Ave. North	Youngstown, Ohio 44502				
Canton, Ohio 44702-1544	(330) 743-3333				
(330) 489-3385	Mahoning, Trumbull Counties				
Stark County					
Dept. of Environmental Services	Regional Air Pollution Control Agency				
Southwest Ohio Air Quality Agency	Montgomery County Health Department				
250 William Howard Taft Road	117 South Main St., P.O. Box 972				
Cincinnati, Ohio 45219-2660	Dayton, Ohio 45422-1280				
(513) 946-7777	(937) 225-4435				
Hamilton, Butler, Warren, Clermont counties	Montgomery, Preble, Darke, Miami, Clark,				
	Greene				
Cleveland Department of Public Health & Welfare	Lake County General Health District				
Division of Air Quality	Air Pollution Control				
75 Erieview Plaza	33 Mill St.				
Cleveland, Ohio 44114	Painesville, Ohio 44077				
(216) 664-2297	(440) 350-2543				
Cuyahoga County	Lake, Geauga counties				
Air Pollution Unit	Ohio EPA				
Portsmouth City Health Department	Central District Office				
605 Washington Street	50 West Town St.				
Portsmouth, Ohio 45662	Columbus, Ohio 43215				
(740) 353-5156	(614) 728-3778				
Brown, Adams, Scioto, Lawrence					
Ohio EPA	Ohio EPA				
Northeast District Office	Northwest District Office				
2110 Aurora Rd.	347 North Dunbridge Rd.				
Twinsburg, Ohio 44087	Bowling Green, Ohio 43402				
(330) 425-9171	(419) 352-8461				
Ohio EPA	Ohio EPA				
Southeast District Office	Southwest District Office				
2195 Front St.	401 East Fifth St.				
Logan, Ohio 43138	Dayton, Ohio 45402-2911				
(740) 385-8501	(937) 285-6357				