



2016-2017 Ohio Air Monitoring Network Plan

**Division of Air Pollution Control
May 2016**

Table of Contents

- Executive Summary- 14 pages
- Monitoring Sites Table, breakdown of each Local and District Agencies Sites- 14 pages
- Appendix A- Ohio Active Monitoring Sites Quick View Tabulation Table- 6 pages
- Appendix B- RAPCA 2016-2017 Air Monitoring Network Plan- 11 pages
- Appendix C- SWOAQA 2016-2017 Air Monitoring Network Plan- 2 pages
(Includes their site description templates)
- Appendix D- CBSA Site requirements vs. Site Plan-3 pages
- Appendix E- Ohio EPA Pollutant Network Maps- 26 pages
 - Page 1-6 Ozone
 - Page 7-11 PM_{2.5}
 - Page 12-14 SO₂
 - Page 15-17 PM₁₀
 - Page 18-19 CO
 - Page 20-21 NO₂
 - Page 22-23 Pb/Metals
 - Page 24-25 PM_{2.5} CSpec
 - Page 26 Toxics (VOCs)
- Appendix F- Monitoring Site Description Templates- 156 pages
 - Akron Regional Air Quality Management District- 9 pages
 - Canton Air Pollution Control Division- 7 pages
 - Cleveland Division of Air Quality- 17 pages
 - Lake County General Health District- 7 pages
 - Mahoning-Trumbull APC Agency- 10 pages
 - Portsmouth City Health Department, Air Pollution Unit, 10 pages
 - Regional Air Pollution Control Agency(Dayton)- 13 pages
 - Southwest Ohio Air Quality Agency, SWOAQA, Cincinnati- 25 pages
 - Toledo Division of Environmental Services- 10 pages (a separate pdf attachment)
 - Ohio EPA, Central District Office-14 pages
 - Ohio EPA, NE District Office-8 pages
 - Ohio EPA, NW District Office-7 pages
 - Ohio EPA, SE District Office-15 pages
 - Ohio EPA, SW District Office-4 pages

Ohio 2016-2017 Air Monitoring Network

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, 2016 is included in the accompanying table.

Changes

The plan for Ohio's Air Monitoring Network for 2016-2017 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 2016. 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 site network will have minimal changes for 2016 and 2017 with the exception that the 2017 monitoring season will begin March 1, 2017. 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, here is a list of monitoring network changes that have occurred in the second half of 2015 or thus far in 2016 or are proposed for the remaining portion of 2016 and 2017.

Canton-Massillon MSA

Canton LAA

- 1 new PM_{2.5} TEOM Sharp 5030i replaced former continuous PM_{2.5} monitor at 39-151-0020, Canton City Health Department.
- 1 ozone site may be discontinued and relocated in Alliance, (39-151-4005, Canton).
- 1 Lead site to be added near a Republic Steel in Stark County as a result of exceeding the 50-ton emission limit, Canton. To start in early 2017

Columbus MSA

CDO

- 1 PM_{2.5} hourly and a black carbon monitor to be added at the Columbus Near Road site (39-049-0039)-in 2016 or 2016 CDO

Cleveland-Elyria, MSA

Cleveland, NEDO

- 1 TSP/Lead/metals site to discontinue at a Cleveland >50-ton emission source, Century Plant, (39-035-0072) before 2017. Monitoring has been ongoing for 3 years and concentrations are well within the new NAAQS lead standards promulgated in 2008.
- 1 Lo-Vol/Lead site to discontinue at Cleveland's NCore site to discontinue in 2016. GT Craig, 39-035-0060.
- 1 PM₁₀, PM_{2.5} FRM, hourly and speciation Lorain county site (39-093-3002, NEDO) likely to be discontinued and relocated before 2017
- 1 Lorain County ozone site, 39-093-0018 may be relocated before the 2017 ozone season to location where the Barr School site (39-093-3002) is relocated-NEDO
- 2 TSP/Lead/metals sites to be added for source monitoring in Cleveland in 2017.

Columbiana Micropolitan Statistical Area

NEDO

- 1 PM₁₀, TSP/Metals Columbiana county site in East Liverpool was relocated off the roof of a school building onto ground-level monitoring platform just east of school. 39-029-0022 now AQS site no., 39-029-0023, WTI Eastside School, NEDO.
- 1 PM₁₀, TSP/Metals site Columbiana county site (39-029-0020) at the Water Treatment Plant in East Liverpool may be relocated in 2016 from its present location to better meet siting criteria. (NEDO)
- 2 TSP/Lead/metals temporary sites to be added in 2017 near a fracking source in Carroll county, Ohio.

Cincinnati, OH-KY-IN MSA

Cincinnati (SWOAQA)

- 1 PM₁₀/TSP/Lead/metals site (39-017-0015, Lefferson) discontinued 12/31/2015 in Middletown – SWOAQA
- 1 VOC monitor ended 12/31/2015 in Middletown (39-017-0003, Verity School, being demolished) – SWOAQA. Monitor moved to new location at 39-017-0015
- 1 PM_{2.5}, PM₁₀ Lo-Vol. site was discontinued in Middletown (39-017-0003, SWOAQA) on Mar. 31, 2016. The samplers were moved to the new location at Lefferson, 39-017-0015 in Middletown.
- 2 PM₁₀, 1 PM_{2.5}, and VOC monitors starting sampling at new location at the Lefferson Middletown property, 39-017-0015 on April 1, 2016. Some of the monitors came from the Verity School site which was discontinued Dec. 31, 2015.
- 1 PM_{2.5}, Sycamore, 39-061-0006, sample frequency to change from 1/3 to 1/6 in January 2017. FEM will become primary at site and FRM will change to QA collocated.
- 1 PM_{2.5} collocated sampler at Carthage, 39-061-0014, will be removed January, 2017. Required collocated monitors met for this method code at other existing sites in the SWPQAO.
The primary PM_{2.5} sampler will change from an Anderson method (155) to a BGI method (142) beginning January 1, 2017.
- 1 True NO₂ and 1 aethalometer black carbon, Taft NCore, 39-061-0040, added by January 2017.
- 1 PM_{2.5}, 39-025-0022, BPG, Sample frequency to change from 1/6 to 1/3 in 2017.
- 1 ozone site, Hamilton, 39-017-0004 will be moved before the 2017 season.
- VOC monitor at Kibby Lane (39-061-0047) sample frequency will change from every sixth day to every 12 days at any time. The consent decree is ending any day.
- 1 PM_{2.5} continuous monitor being added to the Cincinnati Near Rd., site, 39-061-0048 by January, 2017

Dayton-Springfield MSA

RAPCA, Dayton-Springfield

- Lead/Metals sampling at the Moraine (39-113-7001) site to be discontinued before 2017. (RAPCA)

Meigs County, Pomeroy

SEDO

- SO₂ site (39-105-0003) in Pomeroy will be discontinued and relocated during the summer of 2016. A search of potential sites is currently being done to relocate the SO₂ monitor. Also, as part of a special American Electric Power (AEP) study, several new SO₂ sites are being planned in this area to start sometime later in 2016.

Point Pleasant Micropolitan Statistical Area

SEDO-Gallia County

- SO₂ site (39-105-0003) in Pomeroy will be discontinued and relocated during the summer of 2016. A search of potential sites is currently being done to relocate the SO₂ monitor. Also, as part of a special American Electric Power (AEP) study, several new SO₂ sites are being planned in this area to start sometime later in 2016.

Youngstown-Warren-Boardman, OH-PA MSA

MTAPCA

- 1 PM_{2.5}, PM₁₀ site in Warren (39-155-0005) discontinued 5/31/2015. Was

- relocated on the same property- M-TAPCA
- 1 PM₁₀ site in Youngstown (39-099-0006) may discontinue or be relocated in 2016 – M-TAPCA
 - 1 PM_{2.5}, PM₁₀ site in Warren relocated on same property and began sampling Jan. 1, 2016. 39-155-0014 replaced 39-155-0005-M-TAPCA.

Toledo MSA

Toledo

- 1 Toledo O₃, (Lo Serv., 39-095-0034) site to end Oct. 2016. This site is being replaced by another site 0.5 miles to the SE which is scheduled to begin sampling here in 2016.
- 1 Toledo O₃, new site to start August 2016 to replace the Lo-Serv. Ozone site in 2017- Toledo

Wheeling, VA-OH MSA

- 1 SO₂, NO₂, CO, PM_{2.5}. 2 PM₁₀ site started July 1, 2015; 39-013-0006, 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.

Tabular Summary of Proposed Monitoring Changes

Supporting Agency	AQS Site No.	Site Name or Address	Action Change	When
Canton	39-151-4005	Alliance	Ozone site may be relocated	possibly before 2017
	39-151-xxxx	Republic Steel	Lead monitor for >50ton source	early 2017
Cleveland	39-035-0060	G.T. Craig, NCore site	To end Lead/ metals monitoring	during 2016
	39-035-0072	Century_ Miles Rd	To end this Lead/ metals site	during 2016
	39-035-xxxx	Cleveland area PB sources	2 new lead sites to be added	In 2017.
SWOAQO	39-017-0003	Middletown, Verity HS	1 PM ₁₀ Lo-Vol. 1 PM _{2.5} , VOC	Site ended 3/31/2016
(Cincinnati)	39-017-0004	Hamilton	Ozone to be relocated	by 2017 ozone season.
	39-017-0015	Middletown, Lefferson	Lead/Metals, sampling ended	12/31/15
	39-017-0015	Middletown, Lefferson	2 PM ₁₀ , 1 PM _{2.5} , VOC	Started 4/1/2016.
	39-017-0022	BPG	1 PM _{2.5} BGI, SF changes 1/6 to 1/3	in 2017
	39-061-0006	Sycamore	PM _{2.5} FEM becomes primary, FRM changes to collocated and SF change from 1/3 to 1/6	Jan. 2017
	39-061-0014	Carthage	PM _{2.5} method change from 155 to 142, remove collocated monitor	Jan. 2017
	39-061-0040	TAFT, Cincinnati	Add true NO ₂ and aethalometer	Jan. 2017
	39-061-0048	Cincinnati Near Rd.	PM _{2.5} hourly instr. to be added	by 2017
RAPCA (Dayton)	39-113-7001	Moraine Fire Station	Lead/Metals sampling to end	by 2017
M-TAPCA	39-155-0005	Laird Ave., Warren	Site relocated on same property	Site ended 5/31/2015
	39-155-0014	Laird Ave., Warren	Replace former site	Started Jan. 1, 2016
	39-155-0006	Warren WTP	May discontinue or relocated	2016 or 2017
Toledo	39-095-0034	Lo Serv., Curtice	Ozone site to be discontinued	end of 2016 ozone season.
	39-095-0035	Cooley Canal, Curtice	Ozone site to replace 095-0034	Starts in 2016
Ohio CDO	39-049-0038	Columbus Near Rd Site	1 PM _{2.5} hourly monitor	To start in 2016
Ohio, NEDO	39-029-0022	WTI, Eastside School	1 PM ₁₀ , Lead/metals	Site relocated, 1/31/16.
	39-029-0023	WTI, Eastside School	1 PM ₁₀ , Lead/metals	Started 2/1/2016
	39-093-3002	Barr School	1 PM ₁₀ , PM _{2.5} col., PM _{2.5} CSpec	May relocated by 2017.
	39-093-0018	4706 Detroit Rd.	Sheffield ozone site	May relocated in 2017.
	39-019-xxxx	Carroll County	1 site to monitor near a fracking	source to be begin 2017
Ohio, SEDO	39-013-0006	Shadyside PSD	1 SO ₂ , NO ₂ , CO, PM ₁₀ , PM _{2.5}	Site started July 1, 2015
	39-105-0003	Meigs Cty, Pomeroy	1 SO ₂ being relocated	this summer, 2016.
	39-053?-xxxx	3 new SO ₂ sites near the	Gavin Power Plant as a result of the	of DRR before 2017.

Public Comments

In response to posting this network plan on the Ohio EPA website, we received one comment from a law firm, ECKERT SEAMANS CHERIN & MELLOTT, LLC in Pittsburgh, PA. Their comment related to a monitoring site, AQ # 39-029-0020, located in East Liverpool, Columbiana County which monitors WTI incinerator nearby. They do not believe that the site adequately meets U.S. EPA siting criteria and is otherwise not producing representative and/or reliable data. They are requesting that Ohio EPA relocate this monitoring site to a more suitable location. Ohio EPA will investigate the siting suitability and relocate to a better location if it is determined to be necessary.

Ohio's Primary Quality Assurance Organization Changes (PQAO)

Earlier this year, the Ohio EPA proposed to consolidated the number of PQAOs in Ohio for site and monitor auditing purposes. These changes were approved by U.S. EPA and were made retroactive to January 1, 2015. Previously here in Ohio, there was one PQAO associated with each of its 9 Local Air Agencies and 5 District Offices. Each of these Local

Air Agencies (LAAs) and Ohio EPA District Offices were operating as independent entities for quality assurance monitoring purposes which created an unnecessary burden in site QA cost over the years. Therefore, it was proposed to US EPA to streamline Ohio's quality assurance operations by consolidating these 14 PQAOs into 3 PQAOs. This consolidation of PQAOs here in Ohio meets the guidelines and requirements of 40 CFR 58, Appendix D and in no way compromises the integrity and quality of ambient air monitoring data collected here in Ohio.

The new realignment of Ohio's PQAOs is as follows:

Northeast Primary Quality Assurance Organization (NEPQAO) consist of these monitoring organizations.

- Akron Regional Air Quality Management District
- Canton City Health Dept., Air Pollution Control Division
- Cleveland Dept. of Public Health & Welfare, Division of Air Quality
- Lake County General Health District, Air Pollution Control
- Mahoning-Trumbull Air Pollution Control Agency (M-TAPCA)
- Ohio Northeast District Office (NEDO)

Central Primary Quality Assurance Organization (CPQAO) consist of these monitoring organizations.

- Ohio EPA, Northwest District Office (NWDO)
- Ohio EPA, Central District Office (CDO)
- Ohio EPA, Southeast District Office (SEDO)
- City of Toledo, Division of Environmental Services

Southwest Primary Quality Assurance Organization (SWPQAO) consist of these monitoring organizations.

- Ohio EPA, Southwest District Office (SWDO)
- Dept. of Environmental Services, Southwest Ohio Air Quality Agency (SWOAQA)
- Montgomery Cty. Health Dept., Regional Air Pollution Control Agency (RAPCA)
- Portsmouth City Health Dept., Air Pollution Unit

Three tables follow that tabulate and list the monitoring organizations within each of the three PQAOs and the ambient air monitoring sites located within these monitoring organizations.

Northeast Primary Quality Assurance Organization
June 2016

<i>AQS Number</i>	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} cont.	Pb/Metals	Toxics (VOC)
<i>NEDO</i>											
39-007-1001	Conneaut WTP			X	X						
39-029-0019	WTI Port Authority				X					X	
39-029-0020	WTI East Liverpool		X							X	
39-029-0022	WTI Eastside Sch.		X/colo							X/colo	
39-093-0018	Elyria			X							
39-093-3002	Barr School	X/colo	X					X	X		
Total	6	1/ 1colo	3/ 1colo	2	2			1	1	3/ 1colo	
<i>Cleveland</i>											
39-035-0034	District 5	X		X							
39-035-0038	St Theodosius	X/colo	X		X			X		X	X
39-035-0042	FS#4									X/colo	
39-035-0045	FS#13	X	X/colo		X						
39-035-0049	Ferro									X/colo	
39-035-0051	Galleria					X					
39-035-0060	G.T. Craig	X	X	X	X	X	X	X/colo	X	X	
39-035-0061	W 3 rd									X	
39-035-0064	Berea			X							
39-035-0065	Harvard	X	X		X						
39-035-0072	Miles Rd.									X	
39-035-0073	ODOT					X	X				
39-035-1002	Brookpark	X	X								X
39-035-5002	Mayfield			X							
Total	14	6/1 colo	5/ 1colo	4	4	3	2	2/ 1colo	1	6/ 2colo	2
<i>Lake Co. GHD</i>											
39-055-0004	Geauga			X							
39-085-0003	Eastlake			X	X						
39-085-0006	Mentor					X					
39-085-0007	Painesville JFS	X/colo		X	X				X		
39-085-1001	Fairport		X/colo								
Total	5	1/ 1colo	1/ 1colo	3	2	1			1		
<i>M-TAPCA</i>											
39-099-0005	FS#7	X/colo	X								
39-099-0006	FS#5		X/colo								
39-099-0013	Oakhill			X	X						
39-099-0014	Head Start	X							X		
39-155-0006	Warren WTP		X								
39-155-0011	TCSEG			X							
39-155-0013	Kinsman			X							
39-155-0014	Warren Laird	X	X/colo						X		
Total	8	3/ 1colo	4/ 2colo	3	1				2		

**Northeast Primary Quality Assurance Organization
(cont'd)**

<i>AQS Number</i>	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec.	PM _{2.5} cont.	Pb/Metals	Toxics (VOC)
<i>Akron</i>											
39-103-0004	Chippewa	x		x					x		
39-133-0002	Ravenna	x									
39-133-1001	Lake Rockwell			x							
39-153-0017	East High Sch.	x/colo			x				x		
39-153-0020	Patterson Park			x		x					
39-153-0023	Exchange	x						x			
39-153-0025	NIHF				x	x					
<i>Total</i>	7	4/ 1colo		3	2	2		1	2		
<i>Canton</i>											
39-151-0016	Malone Uni.			x							
39-151-0017	FS#8	x/colo						x			
39-151-0020	Health Dept.	x				x			x		
39-151-0022	Brewster			x							
39-151-4005	Alliance			x							
<i>Total</i>	5	2/ 1colo		3		1		1	1		
<i>NE PQAO</i>	<i>Total Sites = 45</i>	17/ 5colo	13/ 5colo	18	11	7	2	5/ 1colo	8	9/ 3colo	2

Southwest Primary Quality Assurance Organization

June 2016

AQS Number	Name	PM _{2.5}	PM ₁₀	O3	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} cont	Pb/Metals	Toxics (VOC)
Portsmouth											
39-001-0001	West Union				x				x		
39-087-0011	Wilgus			x							
39-087-0012	Ironton ODOT	x	x	x	x				x		
39-145-0013	New Boston WTP	x/colo	x/colo		x						
39-145-0019	PCAB		x								
39-145-0020	Back Rd		x		x						
39-145-0021	2446 Gallia Pike		x								
39-145-0022	1740 Gallia Pike		x		x						
Total	8	2/ 1colo	6/1colo	2	5				2		
SWOQA											
Name	PM _{2.5}	PM ₁₀	O3	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} cont	Pb/Metals	Toxics (VOC)	
39-017-0004	Hamilton			x							
39-017-0015	Ohio Bell	x	x								
39-017-0016	Sacred Heart Sch.	x									
39-017-0018	Middletown			x							
39-017-0019	Amanda Elem. Sch.	x	x		x			x		x	
39-017-0020	Yankee Rd.	x	x		x			x		x	
39-017-0021	MADE				x						
39-017-0022	BPG	x									
39-025-0022	Batavia			x				x			
39-061-0006	Sycamore	x		x				x			
39-061-0010	Colerain	x		x	x			x			
39-061-0014	Carthage	x/colo	x							x	
39-061-0040	Taft	x/colo	x/colo	x	x	x	x	x	x		
39-061-0042	Lower Price Hill	x									
39-061-0047	Kibby									x	
39-061-0048	Cinci Near Rd.					x	x			Blk C	
39-061-5001	Lockland		x/colo								
39-165-0007	Lebanon			x				x			
Total	18	10/2colo	6/2colo	7	5	2	2	1	7	0	5
SWDO											
Name	PM _{2.5}	PM ₁₀	O3	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} cont	Pb/Metals	Toxics (VOC)	
39-027-1002	Wilmington			x							
39-091-0006	Bellefontaine								x		
Total	2			1					1		
RAPCA											
Name	PM _{2.5}	PM ₁₀	O3	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} cont	Pb/Metals	Toxics (VOC)	
39-023-0001	Springfield WF			x							
39-023-0003	Mud Run			x	x						
39-023-0005	Springfield FH	x						x			
39-057-0005	Yellow Springs	x/colo	x					x			
39-057-0006	Xenia			x							
39-135-1001	Preble Cnty	x	x/colo	x	x	x	x	x			
39-109-0005	Miami East HS			x							
39-113-0034	Riebold					x					
39-113-0037	Eastwood			x							
39-113-0038	Sinclair College	x/colo						x	x		
39-113-7001	Moraine FS		x/colo							x colo	
Total	11	4/ 2colo	3/2colo	6	2	2	1	2	4	1/1 colo	
Southwest PQAO Total = 39		16/5colo	15/5colo	16	12	4	3	3	13	2/1 colo	5

Central Primary Quality Assurance Organization

June 2016

AQS Number	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} Cont	Pb/Metals	Toxics (VOC)
NWDO											
39-003-0009	Lima Bath HS	X/colo		X	X				X		
39-051-0001	Delta									X/colo	
39-101-0003	Marion-Hawthorne									X	
39-101-0004	Marion-Bella									X	
39-173-0003	Bowling Green			X							
39-123-0006 to 0014	Elmore									Ber.	
Total	6	1/ 1colo		2	1				1	3/ 1colo	
SEDO											
	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} Cont	Pb/Metals	Toxics (VOC)
39-009-0003	Gifford	X/colo									
39-013-0006	Shadyside	X	X/colo		X	X	X				
39-081-0001	Brilliant		X								
39-081-0017	Steubenville	X/colo	X/colo	X	X			X	X		X
39-081-0021	Mingo Junction	X									
39-105-0003	Pomeroy				X						
39-115-0004	Hackney				X						
39-167-0004	Marietta			X							
39-167-0008	Wash Co. Career Center									X/colo	
39-081-0018, 0020, 54-009-6000	Cardinal PWR sites				3x						
Total	12	4/ 2colo	3/2colo	2	7	1	1	1	1	1/1 colo	1
CDO											
	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} Cont	Pb/Metals	Toxics (VOC)
39-041-0002	Delaware			X							
39-049-0005	Morse Rd.					X					
39-049-0024	Fairgrounds Gilligan	X	X/colo								
39-049-0029	New Albany			X					X		
39-049-0034	Fairgrounds				X				X		X
39-049-0037	Franklin Pk.			X			X				
39-049-0038	Smky Near Rd.					X	X				
39-049-0039	Barack Rec. Center	X/colo								X	
39-049-0081	Maple Canyon	X		X							
39-083-0002	Centerburg			X							
39-089-0005	Heath			X							
39-097-0007	London			X							
Total	12	3/ 1colo	1/1colo	7	1	2	2		2	1	1
Toledo ESD											
	Name	PM _{2.5}	PM ₁₀	O ₃	SO ₂	CO	NO ₂	PM _{2.5} Spec	PM _{2.5} Cont	Pb/Metals	Toxics (VOC)
39-095-0008	Collins Park WTP				X						
39-095-0024	Erie	X/colo		X					X		
39-095-0026	RAPS	X									
39-095-0027	Waterville			X							
39-095-0028	COPK	X									
39-095-0034	Low Service			X							
Total	6	3/1 colo		3	1				1		
Central PQAO Totals, Sites= 36		11/5colo	4/3colo	14	10	3	3	1	5	5/ 2colo	2
Ohio Total Sites = 120											
Ohio Total Monitors = 239/34colo		44/15colo	32/13colo	48	33	14	8	9/ 1colo	26	16/ 6colo	9

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

Comments about this Ohio Air Monitoring Network Plan may be emailed to:
david.ambrose@epa.ohio.gov

Fax number 614-644-3681

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

2016-2017 Ohio Air Monitoring Network

AQS ID # Air Agency	County/ Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
Akron	Medina								
39-103-0004	Chippewa, Ballash Rd.	41.0604	-81.9239	Ozone	U.V. Photometric	Continuous	Upwind backgrd	Urban	(087)/API 400 E
				PM _{2.5} - FRM Seq.	Gravimetric	1 in 3 days	Population	Neighborhood	(145) Partisol2025VSCC
				PM _{2.5} Met One BAM	Beta attenuation	Continuous	Upwind backgrd	Regional	(170) AQI
	Portage Co.								
39-133-0002	531 Washington Ave. Ravenna	41.1644	-81.2352	PM _{2.5} Seq. FRM	Gravimetric	1 in 3 days	Population	Neighborhood	(145)/Partisol 2025 Plus
39-133-1001	1570 Ravenna Rd., Kent	41.182466	-81.330486	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(087)/ API 1400E
	Summit Co.								
39-153-0017	East High Sch., Akron	41.063526	-81.468956	PM _{2.5} FRM Seq/Colo	Gravimetric	1 in 3 days	Population	Neighborhood	(145) Partisol2025VSCC
				PM _{2.5} BAM	Beta attenuation	Continuous	Population	Neighborhood	(170), AQI, Met One
				Sulfur dioxide	U.V. Fluorescence	Continuous	Highest conc.	Neighborhood	(100) API 100
39-153-0020	800 Patterson Ave, Akron	41.106486	-81.503547	Ozone	U.V. Photometric	Continuous	Population	Urban	(087) /API 400
				Carbon monoxide	Infrared	Continuous	Population	Neighborhood	(093) API 300
39-153-0023	660 W. Exchange St., Akron	41.087956	-81.541611	PM _{2.5} Seq. FRM	Gravimetric	1 in 3 days	Population	Neighborhood	(145) Partisol2025VSCC
				Chemical speciation	Ion Chromatograph	1 in 6 days	SIP information	Neighborhood	(810) Met One BAM
				URG-3000	Carbon speciation	1 in 6 days	SIP information	Neighborhood	
39-153-0025	199 S. Broadway, Akron	40.07914	-81.51627	Carbon monoxide	Infrared	Continuous	Population	Microscale	(093) API 300
				Sulfur dioxide	U.V. Fluorescence	Continuous	Population	Neighborhood	(100) API 100
				Wind speed/wind dir.					
Canton	Stark Co.								
39-151-0016	515 25 th St., Malone University	40.828052	-81.37833	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
39-151-0017	1330 Dueber Ave., Fire Station	40.78689	-81.39419	PM _{2.5} BGI FRM/Col	Gravimetric	1 in 3 days	Highest conc.	Neighborhood	(142) BGI PQ200 VSCC
				Chemical speciation	Ion Chromatograph	1 in 6 days	SIP information	Neighborhood	(810) Met One SASS
				URG-3000	Carbon speciation	1 in 6 days	SIP information	Neighborhood	
39-151-0020	420 Market Ave. Canton			Carbon monoxide	Infrared	Continuous	Population	Middle	(054) Thermo 48i
				PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	AQI (753)
				PM _{2.5} BGI FRM/Col	Gravimetric	1 in 3 days	Population	Neighborhood	(142) BGI PQ200 VSCC
					The new PM_{2.5} Sharp	5030i starts	May/2016	replacing the	TEOM (701)
39-151-0022	45 S. Wabash Ave., Brewster	40.712778	-81.5983	Ozone	U.V. Photometric	Continuous	Upwind Backgr	Urban	(047) Thermo 49

AQS ID # Air Agency	County/ Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
	Canton (cont'd)								
39-151-4005	1175 W. Vine St., Alliance	40.93139	-81.123544	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(047) Thermo 49
39-151-xxxx	2633 Eight St. NE	?	?	TSP-Pb	Hi-Vol/ICP MS	1 in 6 days	Source-oriented	Middle? To start in	(108) (192) early 2017.
Toledo	Lucas Co.								
39-095-0008	3040 York St., Toledo	41.663405	-83.47596	Sulfur dioxide	U.V. fluorescent	Continuous	Population	Highest conc.	(100) API 100
39-095-0024	348 Erie St., Toledo	41.644067	-83.54625	PM _{2.5} TEOM	Oscillating crystal	Continuous	Highest conc.	Neighborhood	AQI\701 R&P TEOM
				PM _{2.5} FRM Seq/Colo	Gravimetric	1 in 3 days	Highest conc.	Neighborhood	(145) Partisol2025VSCC
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
				Wind speed/wind dir.	Propeller/vane				
39-095-0026	2550 Airport Highway	41.620633	-83.64225	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 days	Highest conc.	Neighborhood	(145) Partisol2025VSCC
39-095-0027	200 S. River Road, Waterville	41.494167	-83.718944	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
39-095-0028	3040 York St., Toledo	41.66225	-83.4783	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 days	Highest conc.	Neighborhood	(145) Partisol2025VSCC
39-095-0034	1002 N. Yondota, Low Service	41.675213	-83.30693	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(047) Thermo 49 Site will end 10/2016.
39-095-0035	10739 Corduroy Rd.	41.669001	-83.28717	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(047) Thermo 49 New site begins 5/2016.
39-095-0081	2930 131 st St., Toledo	41.719483	-83.47515	Wind speed/wind dir.	Propeller/vane	Continuous	Population	Neighborhood	
SWOAQA	Butler Co.								
39-017-0003	Verity HS, Bonita & St. John Middletown	39.49369	-84.3543	PM ₁₀	Gravimetric	1 in 6 days	Population	Neighborhood	Site ended 3/31/2016
				PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Neighborhood	POCs 1,4 (142) BGI
				VOCs	GC MS	1 in 12days	Population	Neighborhood	6L-Canister
39-017-0004	Hamilton Fire House Schuler & Bender Ave, Hamilt.	39.38338	84.5443	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(087) API 400 Site likely to relocate or end before 2017 ozone season.
39-017-0015	3901 Lefferson, Middletown Original site ended 12/31/2015 Restarted 4/1/2016 to new	39.49014	-84.3642	PM ₁₀ Lo-Vol	Gravimetric	1 in 6 days	Population	Neighborhood	(125) BGI
				PM _{2.5} Lo-Vol BGI(2)	Gravimetric	1 in 3 days	Population	Neighborhood	(142) POC 1,4
		location on	same	property				monitors now	on ground platform

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
SWOQA	Cont'								
39-017-0016	Sacred Heart School 400 Nilles Rd., Fairfield	39.33841	-84.5666	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Urban	(142) BGI PQ200VSCC POCs 1,4
39-017-0018	Hook Field Airport, Middletwn	39.529444	-84.393453	Ozone	U.V. Photometric	Continuous	Population	Urban	(087) API 400
39-017-0019	Amanda School 1300 Oxford Rd., Middletown	39.478849	-84.407675	PM ₁₀ –Low Vol. PM _{2.5} FRM BGI (2)	Gravimetric Gravimetric	1 in 6 days 1 in 3 days	Source oriented Source oriented	Neighborhood Neighborhood	(125) BGI PQ200 POCs 1,4 (142) PQ200
				PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Source oriented	Neighborhood	AQI\753 Thermo 5030
				Sulfur dioxide	U.V. Florescence	Continuous	Source oriented	Neighborhood	100\API 100
				VOC	GC/MS	1 in 12days	Source oriented	Neighborhood	6L-Canister
39-017-0020	3350 Yankee Rd., Middletown	39.472436	-84.394952	PM ₁₀ -Low Vol. PM _{2.5} BGI FRM (2)	Gravimetric Gravimetric	1 in 6 days 1 in 3 days	Source oriented Source oriented	Neighborhood Middle Scale	(125) BGI PQ200 POC 1,4 (142) PQ200
				PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Source oriented	Neighborhood	AQI\753 Thermo 5030
				Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	100\API 100
				VOC	GC/MS	1 in 12days	Source oriented	Neighborhood	6L-Canister
39-017-0021	1491 Made Industrial Dr. Middletown	39.464718	-84.4037	Sulfur dioxide	U.V. Florescence	Continuous	Source oriented	Neighborhood	100\API 100
39-017-0022	3214 Yankee Rd., Middletown Clermont Co.	39.47869	-84.3971	PM _{2.5} BGI FRM SPM	Gravimetric Sample freq. changes	1 in 6 days to 1/3	Source oriented from 1/6 in 2017	Neighborhood	(142) BGI PQ200 VSCC
39-025-0022	2400 Clermont Drive, Batavia Hamilton Co.	39.0828	-84.1441	PM _{2.5} TEOM FDMS Ozone	Oscillating crystal U.V. Photometric	Continuous Continuous	Highest conc. Max. Ozone conc	Neighborhood Urban	AQI(761) R & P FDMS (087) API 400
39-061-0006	11590 Grooms Rd., Sycamore	39.2787	-84.366192	PM _{2.5} BGI FRM PM _{2.5} Thermo Sharp	Gravimetric Beta Attenuation	1 in 3 days Continuous	Population Population	Neighborhood Neighborhood	(142) PQ200 VSCC (184) Thermo 5030i
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	(087) API 400
				FRM changes to 1/6	from 1/3 in 2017.	PM _{2.5} cont.	FEM to become	primary	monitor in 2017.
39-061-0010	Colerain, 6950 Ripple Rd. Cleves	39.21487	-84.69086	Sulfur dioxide Ozone	U.V. Fluorescence U.V. Photometric	Continuous Continuous	Population Population	Neighborhood Urban	(100) API 100 (087) API 400
				PM _{2.5} Met One BAM	Beta Attenuation	Continuous	Population	Urban	AQI (733), BAM VSCC
				PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Urban	POCs 1,4 (142) PQ200
39-061-0014	Carthage Fire House Seymour & Vine, Cincinnati	39.19433	-84.47898	PM ₁₀ Hi-Vol PM _{2.5} FRM Seq/Colo	Gravimetric Gravimetric	1 in 6 days 1 in 3 days	Highest conc. Population	Middle Neighborhood	(063) GMW 1200 (155) RASS2.5 w/VSCC
				(155) started 4/1/16.	On 1/1/2017 one BGI	will start	(142) with no	collocated	sampler.
				VOCs	GC MS	1 in 12days	Urban	Neighborhood	6L-Canister

AQS ID # Air Agency	County/ Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
Cleveland	Cuyahoga Co.								
39-035-0034	891 E. 152 St. Cleveland	41.55523	-81.575256	PM _{2.5} FRM Seq. Ozone	Gravimetric U.V. Photometric	1 in 3 days Continuous	Population Population	Urban Neighborhood	(145) Partisol2025VSCC (087) API400
39-035-0038	St. Theodosius, St. Tikon St. Cleveland	41.477011	-81.682383	PM ₁₀ Hi-Vol. (5) unit PM _{2.5} FRM Seq TSP lead-metals Sulfur dioxide Chemical Speciation VOCs	Gravimetric Gravimetric Hi-Vol/ICP MS Pulsed Fluorescence Ion Chromatograph GC MS	1 in 1 day 1 in 3 days 1 in 6 days Continuous 1 in 6 days 1 in 12days	Highest conc. Highest conc. Highest conc. Highest conc. SIP info Population	Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood	(063) POCs 1,4,6,7,8 (145) Partisol2025VSCC (108) (192) (060) Thermo 43b (810) Met One SASS 6L-canister
39-035-0042	Fire Station 4, 3136 Lorain	41.4823	-81.708906	TSP Pb\Metals Colo.	Hi-Vol/ICP MS	1 in 6 days	Population	Middle	
39-035-0045	FS 13, 4950 Broadway Ave. Cleveland	41.471782	-81.656792	PM ₁₀ Hi-Vol./Colo. PM _{2.5} FRM Seq. Sulfur dioxide	Gravimetric Gravimetric Pulsed Fluorescence	1 in 6 days 1 in 3 days Continuous	Population Population Population	Neighborhood Neighborhood Neighborhood	(063) GMW 1200 (145) Partisol2025VSCC (060) Thermo 43c
39-035-0049	Ferro Corp. E. 56 th St. Cleveland	41.446342	-81.6507	TSP-Pb/Metals Colo.	Hi-Vol/ICP MS	1 in 6 days	Source-oriented	Neighborhood	(108) (192)
39-035-0051	Galleria, E. Ninth & St. Clair	41.504661	-81.690186	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	(054) Thermo 48c
39-035-0060	GT Craig, E. 14 th & Orange N-Core site Cleveland	41.492117	-81.678449	PM ₁₀ Hi-Vol. PM ₁₀ TEOM PM _{2.5} FRM Seq. PM _{2.5} MetOne BAM PM _{2.5} Spec. Colo. URG-3000	Gravimetric Oscillating crystal Gravimetric Beta attenuation Ion Chromatograph Carbon speciation	1 in 6 days Continuous 1 in 3 days Continuous 1 in 3 days 1 in 6 days	Population Population Population Population SIP info SIP information	Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood	(063) GMW 1200 (079) R&P 1400 (179) Partisol Dicot2025i AQI (170) MetOne BAM (810) Met One SASS
	Proposed to Region V to end	Pb/metals	sampling	TSP lead-metals Ozone NO ₂ Sulfur dioxide Sulfur dioxide-trace NO _y CO-trace PM ₁₀ local PM _{10-2.5} Seq.	Hi-Vol/ICP MS U.V. Photometric Chemiluminescence Pulsed Fluorescence Pulsed Fluorescence Chemiluminescence Carbon monoxide Gravimetric Gravimetric	1 in 6 days Continuous Continuous Continuous Continuous Continuous Infrared 1 in 3 days 1 in 3 days	Highest conc. Population Population Population Population Population Population Population Population	Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood Neighborhood	(108) (192) (087) API400 (074) Thermo 42i (060) Thermo 43a (560) Thermo 43C-TLE (674) (554) Thermo 48i-TLE (127) Partisol 2025i (176) Partisol Plus 2025
				PM ₁₀ Local Seq.	Gravimetric	1 in 6 days	Population	Neighborhood	(127) Partisol Plus 2025

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
RAPCA cont'									
	Miami Co.								
39-109-0005	3825 N. Rt. 589, Castown	40.08455	-84.11412	Ozone	U.V. Photometric	Continuous	Max. ozone conc.	Urban	(047) Thermo 49
	Montgomery Co								
39-113-0034	117 S. Main St., Dayton	39.757837	-84.191667	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	(054) Thermo 48i
39-113-0037	1401Harshman Rd., Dayton	39.7863	-84.1337	Ozone	U.V. Photometric	Continuous	Population	Urban	(047) Thermo 49
39-113-0038	Sinclair Community College 444 W. Third St., Dayton	39.7560	-84.1987	PM _{2.5} FRM Seq/Colo	Gravimetric	1 in 3 days	Highest Conc.	Neighborhood	(145)/Partisol 2025
				PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Highest Conc.	Neighborhood	(750) Thermo Sharp5030
				Chemical Speciation	Ion Chromatograph	1 in 6 days	SIP information	Neighborhood	(810) Met One SASS
				URG-3000	Carbon speciation	1 in 6 days	SIP information	Neighborhood	
39-113-7001	2728 Viking Lane, Moraine	39.71451	-84.21798	PM ₁₀ Hi-Vol./Colo.	Gravimetric	1 in 6 days	Highest conc.	Neighborhood	(063) GMW 1200
				TSP-Pb/Metals-Colo.	ICP	1 in 6 days	Population	Neighborhood	(192) Mass Spectrometry
					Proposed to Region	V to end	metals/ lead	sampling by	the end of 2016.
	Preble Co.								
39-135-1001	National Trail School	39.8362	-84.72049	PM _{2.5} FRM Seq.	Gravimetric	1 in 3 days	Upwind backgd.	Regional	(145) Partisol2025VSCC
N-Core site	6940 Oxford Gettysburg Rd. St. Rt. 40, New Paris			PM _{2.5} Thermo Sharp	Beta attenuation	Continuous	Upwind backgd.	Regional	(750) Thermo Sharp5030
				Ozone	U.V. Photometric	Continuous	Upwind backgd.	Regional	(047) Thermo 49
				Sulfur dioxide- trace	Pulsed Fluorescence	Continuous	Upwind backgd.	Regional	(560) Eco Tech 9850
				Carbon monoxide	Infrared	Continuous	Upwind backgd.	Regional	(554) Thermo48i-TLE
				NO _y	Chemiluminescence	Continuous	Upwind backgd.	Regional	(674)
				NO-trace	Chemiluminescence	Continuous	Upwind backgd.	Regional	(574) Eco Tech 9841?
				PM _{10-2.5} Coarse	Gravimetric	1 in 3 days	Upwind backgd.	Regional	(176) Partisol Plus 2025
				PM ₁₀ – LC-colo	Gravimetric	1 in 3 days	Upwind backgd.	Regional	(127) Partisol Plus 2025
				URG-3000	Carbon speciation	1 in 6 days	Upwind backgd.	Regional	
				Chemical Speciation	Ion Chromatograph	1 in 6 days	Upwind backgd.	Regional	(810) Met One SASS
				WSpd/WDir/MET	Sonic	Continuous			(022) Resultant WS/WD
MTAPCA	Mahoning Co.								
39-099-0005	Elm & Madison, FS #7	41.111111	-80.645278	PM ₁₀ Hi-vol.	Gravimetric	1 in 6 days	Population	Neighborhood	(063) GMW 1200
				PM _{2.5} FRM BGIColo	Gravimetric	1 in 6 days	Highest Conc.	Neighborhood	(142) BGI PQ200 VSCC
39-099-0006	Superior & Oakland, Fire St. 5	41.116667	-80.669722	PM ₁₀ Hi-Vol./Colo.	Gravimetric	1 in 6 days	Population	Neighborhood	(063) GMW 1200
				Site may be	discontinued or	Relocated	In 2016 or 2017.		

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
	Mahoning Co.								
39-099-0013	345 Oakhill Ave. Youngstown	41.096142	-80.65852	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	(061) Dasibi4108
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(087) API 400
39-099-0014	345 Oakhill Ave. Youngstown	41.095938	-80.658467	PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Neighborhood	POC 1,4 (142) PQ200
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI(701) TEOM SCC
	Trumbull Co.								
39-155-0005	540 Laird Ave., Warren	41.231167	-80.801914	PM ₁₀ -Colo	Gravimetric	1 in 6 days	Population	Neighborhood	Terminated May 2015
	Site relocated on same property 39-155-0014			PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Neighborhood	POCs 1,4 (142) PQ200
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI
39-155-0006	Warren Water Treatment Plant	41.202237	-80.810644	PM ₁₀ Hi-vol.	Gravimetric	1 in 6 days	Source-oriented	Neighborhood	(062) Wedding
39-155-0011	St. Rt. 193, Vienna, TCSEG	41.240456	-80.662759	Ozone	U.V. Photometric	Continuous	Max. Ozone Con.	Urban	(087) API 400
39-155-0013	6380 SR 87, Kinsman Twnshp Maintenance Bldg., Kinsman	41.454546	-80.58805	Ozone	U.V. Photometric	Continuous	Reg. transport	Urban	(087) API 400
39-155-0014	540 Laird Ave., Warren	41.231167	-80.801914	PM ₁₀ Hi-vol./Colo.	Gravimetric	1 in 6 days	Population	Neighborhood	(062) Wedding
	Site started Jan. 1, 2016			PM _{2.5} BGI FRM (2)	Gravimetric	1 in 3 days	Population	Neighborhood	POCs 1,4
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI (701) TEOM SCC
Lake LAA	Geauga Co.								
39-055-0004	Notre Dame School, Munson	41.51551	-81.249906	Ozone	U.V. Photometric	Continuous	Max. Ozone Con.	Urban	(087) API 400
	Lake Co.								
39-085-0003	Jefferson School, Eastlake	41.673006	-81.422455	Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Neighborhood	(100)/API 100
				Ozone	U.V. Photometric	Continuous	Max. Ozone Con.	Neighborhood	(087) API 400
39-085-0006	8443 Mentor Ave., Mentor	41.666886	-81.338781	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	(051) Dasibi3003
39-085-0007	177 Main St., Painesville	41.726811	-81.242156	PM _{2.5} FRM Seq/Colo	Gravimetric	1 in 3 days	Highest conc.	Urban	(120) RASS2.5-300
				PM _{2.5} TEOM FDMS	Oscillating crystal	Continuous	Highest conc.	Urban	AQI (760) R&P TEOM
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Middle	(100)/API 100
				Ozone	U.V. Photometric	Continuous	Max. Ozone Con.	Urban	(087) API 400
39-085-1001	Fairport High School, Fairport	41.75489	-81.273076	PM ₁₀ Hi-vol./Colo.	Gravimetric	1 in 6 days	Population	Neighborhood	(063) GMW 1200

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
NEDO	Ashtabula Co.								
39-007-1001	Conneaut Water Plt., Conneaut	41.959695	-80.572808	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	(060) Thermo 43C
				Ozone	U.V. Photometric	Continuous	Population	Regional	(047) Thermo 49
	Columbiana Co.								
39-029-0019	Columbiana Port Authority, East Liverpool	40.631545	-80.547181	TSP-lead-metals	Hi-Vol/ICP MS	1 in 6 days	Population	Neighborhood	(108) (192)
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	(060) Thermo 43C
39-029-0020	Water Treat. Plant, East Liverpool	40.639595	-80.524019	TSP-lead-metals	Hi-Vol/ICP MS	1 in 6 days	Population	Neighborhood	(108) (192)
				PM ₁₀ Hi-Vol	Gravimetric	1 in 6 days	Population	Neighborhood	(062) Wedding
								Site may be	relocated.
39-029-0022/ 39-029-0023	500 Maryland Ave., East Liverpool	40.635275 40.6349	-80.546642 -80.5457	TSP-Pb/metals/Colo. PM ₁₀ Hi- Vol./Colo.	Hi-Vol/ICP MS Gravimetric	1 in 6 days 1 in 6 days	Population Population	Middle scale Middle scale	(108) (192) (062) Wedding
This site	moved off roof to ground level	Platform in	Feb. 2016	and became	AQS# 39-029-0023				
	Lorain Co.								
39-093-0018	Fire Station, Sheffield	41.420882	-82.095729	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
					Site may be relocated	before	2017 to the Barr	School	relocated site.
39-093-3002	Barr School, Sheffield	41.463071	-82.114261	PM ₁₀ Hi-vol.	Gravimetric	1 in 6 days	Source-oriented	Neighborhood	(062) Wedding
	This site will be relocated			PM _{2.5} FRM Seq.Colo	Gravimetric	1 in 3 days	Source-oriented	Neighborhood	(120) RASS25-300
	Likely before 2017.			PM _{2.5} TEOM	Oscillating crystal	Continuous	Source-oriented	Neighborhood	AQI(701) TEOM- SCC
				Chemical Speciation	Ion Chromatograph	1 in 12days	Source-oriented	Neighborhood	(810) Met One SASS
				URG-3000	Carbon speciation	1 in 6 days	Source-oriented	Neighborhood	
NWDO	Allen Co.								
39-003-0009	Bath High School, Lima	40.770944	-84.0539	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	(100) API 100
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
				PM _{2.5} FRM BGI/colo	Gravimetric	1 in 6 days	Population	Neighborhood	(142) BGI PQ200 VSCC
				PM _{2.5} TEOM	Oscillating crystal	Continuous	Population	Neighborhood	AQI (701) TEOM- SCC
	Fulton Co.								
39-051-0001	200 Van Buren St., Delta	41.57588	-83.9959	TSP-PB\metals Colo.	Hi-Vol/ICP MS	1 in 6 days	Source-oriented	Middle	(108) (192)
	Marion Co.								
39-101-0003	Nucor Steel, Hawthorne Ave.	42.57141	-83.13556	TSP-lead	Hi-Vol/ICP MS	1 in 6 days	Population	Middle	Marion (108) (192)
39-101-0004	640 Bellefontaine Ave.	40.57666	-83.14024	TSP-lead-metals	Hi-Vol/ICP MS	1 in 6 days	Population	Middle	Marion (108) (192)
	Ottawa Co.								
39-123-0006 to 123-0014	Materion, Elmore	41.494722	-83.214444	TSP – beryllium	Hi-Vol/ICP MS	7daysample	Source-oriented	Middle	Brush-Wellman (9 sites) operated by BW.

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
NWDO cont' 39-173-0003	Wood Co. NWDO Office, Bowling Green	41.377685	-83.611104	Ozone	U.V. Photometric	Continuous	Upwind Backgd	Urban	(047) Thermo 49
SEDO 39-009-0003	Athens Co. St. Rt. 377, Gifford Forest	39.442165	-81.908827	PM _{2.5} FRM BGI/colo	Gravimetric	1 in 6 days	Background	Regional	(142) BGI PQ200 VSCC Background PM _{2.5} site
39-013-3002	Belmont Co. E. 40 th St. Shadyside Treatment	39.96862	-80.7449	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	Site ended 6/30/2015
39-013- 0006	Ballpark Rd. PSD site started July 1, 2015.	39.9678	-80.7476	Sulfur dioxide	U.V. Fluorescence	Continuous	General Backgd.	Neighborhood	(100) API 100
				PM ₁₀ Lo-Vol/Colo.	Gravimetric	1 in 6 days	General Backgd.	Neighborhood	(125) Partisol 2025i
				NO ₂	Chemiluminescence	Continuous	General Backgd.	Neighborhood	(099) API 200
				Carbon Monoxide	Infrared	Continuous	General Backgd.	Neighborhood	(093) API 300
				PM _{2.5} FRM Seq.	Gravimetric	1 in 3 days	General Backgd.	Neighborhood	(145) Partisol2025VSCC
				Meteorological	Sonic	Continuous		Neighborhood	(063) Climatronics
39-081-0001	Jefferson Co. 1004 3 rd St., Brilliant	40.26157	-80.6335	PM ₁₀ Hi-vol	Gravimetric	1 in 6 days	Population	Neighborhood	(063) GMW 1200
39-081-0017	618 Logan St., Steubenville	40.36644	-80.6158	Sulfur dioxide	U.V. Fluorescence	Continuous	Population	Neighborhood	(100) API 100
				PM ₁₀ Hi- Vol./Colo.	Gravimetric	1 in 6 days	Highest conc.	Neighborhood	(063) GMW 1200
				PM _{2.5} FRM Seq/Colo	Gravimetric	1 in 3 days	Population	Neighborhood	(145) Partisol2025VSCC
				PM _{2.5} BAM	Beta attenuation	Continuous	Population	Neighborhood	(170) MET ONE BAM
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
				URG-3000	Carbon speciation	1 in 6 days	SIP information	Neighborhood	(AQI)
				Chemical Speciation	Ion Chromatograph	1 in 6 days	SIP info	Neighborhood	(810) Met One SASS
				VOCs	GC MS	1 in 6 days	Population	Neighborhood	6l-Canister
39-081-0021	110 Steuben St Mingo Junction	39.31951	-81.688	PM _{2.5} FRM BGI	Gravimetric	1 in 3 days	Population	Neighborhood	(142) PQ200 POC 1 POC 4 ended 7/14/15.
39-081-0018	3487 Cnty Rd. 19, Brilliant	40.272	-80.62962	Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-Oriented	Neighborhood	(060) Thermo 43A AEP Cardinal Power Plt.
39-081-0019	Landfill Access Rd., Brilliant	40.26786	-80.64986	Wind Speed/Dir.	Sonic	Continuous	Source-Oriented	Neighborhood	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		Neighborhood	(060) Thermo 43A

AQS ID # Air Agency SEDO cont'	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Method Code/ Comments
	Meigs Co.								
39-105-0003	117 Memorial Dr., Pomeroy	39.03849	-82.0459	Sulfur dioxide	Pulsed Fluorescence Site to discontinued	Continuous in 2016 and	Source-oriented relocated.	Neighborhood	(060) Thermo 43C
	Morgan Co.								
39-115-0004	St. Rt. 83, Hackney	39.63223	-81.67005	Sulfur dioxide	U. V. Fluorescence	Continuous	Population	Neighborhood	(100) API 100 Musk.River power plant shutdown 10/2015
	Washington Co.								
39-167-0004	2000 4 th St. Marietta WTP	39.432117	-81.460443	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	(047) Thermo 49
39-167-0008	SR 676 Washington Car. Ctr.	39.43147	-81.50131	TSP-lead/colo/metals	Hi-Vol/ICP MS	I in 6 days	Population	Neighborhood	(108) (192)
	West Virginia								
	Wood County								
54-009-0003	SR 2, Beech Bottom WVA	40.29167	-80.60917	Wind Speed/Dir. Sulfur dioxide	Sonic Pulsed Fluorescence	Continuous Continuous	Source-Oriented	Middle-Scale	AEP Cardinal Power Plt (060) Thermo 43A
	SWDO								
39-027-1002	Laurel Oaks Sch., Wilmington	39.430000	-83.788611	Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	(047) Thermo 49
	Logan Co.								
39-091-0006	320 Richard Ave., Bellefontaine	40.341467	-83.7585	TSP-lead-metals	Hi-Vol/ICP MS	1 in 6 days	Population	Neighborhood	Low lead concentrations (108) (192)

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. PM₁₀ 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. PM₁₀ 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 Sequential sampling. They are Federal Reference Method (FRM).

Collocated 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 days schedule or possibly at a 1 in 12 days 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 Total Suspended Particulate 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 Inductively Coupled Plasma Emission Spectroscopy or Graphic Furnace Atomic Absorption.

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

TEOM indicates a Tapered Element Oscillating Microbalance, a method of detection for 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} helps to determine what control measures and plans will best control fine particulates.

Ohio Air Monitoring Agencies

<p>Akron Regional Air Quality Management District Fairway Center 1867 W. Market St. Akron, Ohio 44308 (330) 375-2480 Medina, Portage, Summit counties</p>	<p>City of Toledo Division of Environmental Services 348 South Erie St. Toledo, Ohio 43604 (419) 936-3015 Lucas County</p>
<p>Air Pollution Control Division Canton City Health Department 420 Market Ave. North Canton, Ohio 44702-1544 (330) 489-3385 Stark County</p>	<p>Mahoning-Trumbull APC Agency 345 Oak Hill Ave. Youngstown, Ohio 44502 (330) 743-3333 Mahoning, Trumbull Counties</p>
<p>Dept. of Environmental Services Southwest Ohio Air Quality Agency 250 William Howard Taft Road Cincinnati, Ohio 45219-2660 (513) 946-7777 Hamilton, Butler, Warren, Clermont counties</p>	<p>Regional Air Pollution Control Agency Montgomery County Health Department 117 South Main St., P.O. Box 972 Dayton, Ohio 45422-1280 (937) 225-4435 Montgomery, Preble, Drake, Miami, Clark, Greene</p>
<p>Cleveland Department of Public Health & Welfare Division of Air Quality 75 Erieview Plaza Cleveland, Ohio 44114 (216) 664-2297 Cuyahoga County</p>	<p>Lake County General Health District Air Pollution Control 33 Mill St. Painesville, Ohio 44077 (440) 350-2543 Lake, Geauga counties</p>
<p>Air Pollution Unit Portsmouth City Health Department 605 Washington Street Portsmouth, Ohio 45662 (740) 353-5156 Brown, Adams, Scioto, Lawrence</p>	<p>Ohio EPA Central District Office 50 West Town St. Columbus, Ohio 43215 (614) 728-3778</p>
<p>Ohio EPA Northeast District Office 2110 Aurora Rd. Twinsburg, Ohio 44087 (330) 425-9171</p>	<p>Ohio EPA Northwest District Office 347 North Dunbridge Rd. Bowling Green, Ohio 43402 (419) 352-8461</p>
<p>Ohio EPA Southeast District Office 2195 Front St. Logan, Ohio 43138 (740) 385-8501</p>	<p>Ohio EPA Southwest District Office 401 East Fifth St. Dayton, Ohio 45402-2911 (937) 285-6357</p>