

Ohio Air Monitoring Network Plan 2014-2015

6/5/14

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, 2014 is included in the accompanying table.

Changes

The plan for Ohio's Air Monitoring Network for 2014-2015 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 2014. 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. 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 number of sites as in 2014.

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.

During the end of 2013 and the beginning of 2014 Ohio added 3 new sites for Near-road NO₂ monitoring. New near-road sites were added in the CBSA's near Cincinnati and Columbus and Cleveland. Other new near-road NO₂ sites may be added by 2017. These added sites were the largest air monitoring projects for 2013-2014.

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:

- 2 lead sampling sites - Canton and MTAPCA
- 1 special purpose PM_{2.5} site - SWOAQA
- 3 VOC industrial sites – Portsmouth

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

- 1 O₃ site - Canton, relocate before 2015 O₃ season
- 2 PM₁₀, PM_{2.5}, Lead and VOC sites, may combine as one - SWOAQA
- 1 SO₂ site moved - NEDO
- 1 PM_{2.5} FRM collocated site moved - SEDO
- 1 PM_{2.5} FRM collocated site - SEDO
- 1 PM_{2.5} FRM site moved - SEDO
- 1 PM_{2.5} Speciation site moved - SEDO
- 1 PM_{2.5} collocated - NWDO
- 1 PM_{10-2.5} dichotomous - Cleveland
- 1 PM₁₀ collocated site to move - CDO
- 1 PM_{2.5} collocated site to move - CDO
- 3 Near-road NO₂ sites - SWOAQA, CDO, Cleveland

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

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Air Monitoring Section
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Ohio Air Monitoring Network – 20014-2015

AQS ID # Air Agency	County Address	Latitude	Longitude	Parameter/ Method	Analysis	Schedule	Monitoring Objective	Spatial Scale	Comments
Akron	Medina								
39-103-0004	Ballash Rd.	41.0604	-81.9239	Ozone	U.V. Photometric	Continuous	Population	Urban	
				PM2.5- FRM	Gravimetric	1 in 3 day	Population	Urban	
				PM2.5 MetOneBAM	Beta attenuation	Continuous	Population	Urban	AQI, New BAM monitor
	Portage. Co.								
39-133-0002	531 Washington Ave. Ravenna	41.1644	-81.2352	PM2.5 Seq. FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
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.	41.079167	-81.5161	Wind speed/wind dir.					
39-153-0017	East High Sch., Akron	41.063526	-81.468956	PM2.5 Seq FRMColo	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM2.5 BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI, rebuilt BAM
				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	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
39-153-0023	660 W. Exchange St. Akron	41.087956	-81.541611	PM2.5 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		
Canton	Stark Co.								
39-151-0016	515 25 th St., Malone College	40.828052	-81.37833	Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				Wind speed/wind dir.	Propeller/vane				
39-151-0017	1330 Dueber Ave.,Fire Station	40.78689	-81.39419	PM2.5 BGI FRMCol	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	
				Chemical speciation	Ion Chromatograph	1 in 6 day	SIP information		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
				TSP – lead	ICP	1 in 6 day	Source-oriented		Low lead, may cease '14

SWOQA	Butler Co.								
39-017-0003	Verity HS, Middletown	39.49369	-84.3543	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	Site may combine with
				PM2.5 BGI FRM	Gravimetric	1 in 3 day	Population	Neighborhood	017-0020
				VOCs	GC MS	1 in 12 day			
39-017-0004	Schuler & Bender Ave, Hamltn	39.38338	84.5443	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-017-0015	3901 Lefferson, Middletown	39.49014	-84.3642	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	Site may combine with
				TSP lead-metals Colo	ICP MS	1 in 6 day	Population	Neighborhood	017-0003
39-017-0016	S. Heart 400 NillesRd, Fairfield	39.33841	-84.5666	PM2.5 BGI FRM	Gravimetric	1 in 3 day	Population	Urban	
39-017-0018	Hook Field Airport, Middletwn	39.529444	-84.393453	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-017-0019	Amanda School, Oxford Rd.	39.478849	-84.407675	PM10 –Low Volume	Gravimetric	1 in 6 day	Source oriented	Neighborhood	
				PM25 FRM BGI	Gravimetric	1 in 3 day	Source oriented	Neighborhood	
				PM2.5 ThermoSharp	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	Yankee Road	39.472436	-84.394952	PM10-low volume	Gravimetric	1 in 6 day	Source oriented	Neighborhood	
				PM2.5 BGI FRM	Gravimetric	1 in 3 day	Source oriented	Neighborhood	
				PM2.5 ThermoSharp	Beta attenuation	Continuous	Source oriented	Neighborhood	AQI
				Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	
				VOC					
39-017-0021	MADE	39.464718	-84.4037	Sulfur dioxide	Pulsed Florescence	Continuous	Source oriented	Neighborhood	Began June, 2013
	Clermont Co.								
39-025-0022	2400 Clermont Drive, Batavia	39.0828	-84.1441	PM2.5 TEOM FDMS	Oscillating crystal	Continuous	Population	Neighborhood	AQI
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
	Hamilton Co.								
39-061-0006	11590 Grooms Rd.,Sycamore	39.2787	-84.366192	PM2.5 Seq. FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM2.5 Thermo Sharp	Beta Attenuation	Continuous	Population	Neighborhood	May get Thermo 5030
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-061-0010	6950 Ripple Rd. Colerain	39.21487	-84.69086	Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
				Ozone	U.V. Photometric	Continuous	Population	Urban	
				PM2.5 MetOne BAM	Beta Attenuation	Continuous			AQI
				PM2.5 BGI FRM	Gravimetric	1 in 3 day			

Cleveland	Cuyahoga Co.								
39-035-0034	891 E. 152 St.	41.55523	-81.575256	PM2.5 Seq. FRM	Gravimetric	1 in 3 day	Highest conc.	Urban	
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
39-035-0038	St. Theodosius, St. Tikon St.	41.477011	-81.682383	PM10	Gravimetric	1 in 3 day	Highest conc.	Neighborhood	
				PM2.5 SeqFRMColo	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	
				PM2.5 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	TSPlead-metals Colo	ICP	1 in 6 day	Highest conc.	Middle	
39-035-0045	FS 13, 4950 Broadway Ave.	41.471782	-81.656792	PM10 Colo	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM2.5 Seq.FRM	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	
39-035-0051	Galleria, E. Ninth & St. Clair	41.504661	-81.690186	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	
39-035-0060	GT Craig, E. 14 th & Orange	41.492117	-81.678449	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM10 TEOM	Oscillating crystal	Continuous		Neighborhood	
				PM2.5 Seq.FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM2.5 MetOne BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
				PM2.5 spec. Colo	Ion Chromatograph	1 in 3 day	SIP info		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
				TSP lead-metals	ICP	1 in 6 day	Highest conc.	Neighborhood	
				Ozone	U.V. Photometric	Continuous	Population	Neighborhood	
				Sulfur dioxide	Pulsed Fluorescence	Continuous			NCore
				NOy	Chemiluminescence	Continuous			NCore
				Carbon monoxide	Carbon monoxide	Infrared			NCore
				PM10 local	Gravimetric	1 in 3 day			NCore
				PM _{10-2.5}	Gravimetric	1 in 6 day			
				NO2	Chemiluminescence	Continuous	Population	Neighborhood	
39-035-0061	South side W. 3 rd St.	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	
39-035-0065	4600 Harvard Ave Newburgh	41.446682	-81.662419	PM10	Gravimetric	1 in 6 day	Highest conc.	Neighborhood	Off line May 28
				PM2.5 Seq. FRM	Gravimetric	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			To resume sampling
39-035-0072	26565 Miles Rd., Warrensville	41.42585	-81.49078	TSP-Lead	ICP	1 in 6 day	Source oriented	Neighborhood	
39-035-0073	Emory Rd., Warrensville Hts.	41.4409	-81.4949	NO2	Chemiluminescence	Continuous	High conc.	Microscale	New Near-road NO2 site Will add CO, PM2.5
39-035-1002	16900 Holland Road	41.39629	-81.818667	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM2.5 Seq. FRM	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	
RAPCA	Clark Co.								
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	
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	
39-023-0005	350 N. Fountain Rd., Springfield	39.928820	-83.80949	PM2.5 Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	
				PM2.5 BGI FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
	Greene Co.								
39-057-0005	100 Dayton Rd. YellowSprings	39.80834	-83.88705	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM2.5 BGI FRMcolo	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM2.5 Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	AQI
39-057-0006	541 Ledbetter Rd., Xenia	39.66575	-83.94285	Ozone	U.V. Photometric	Continuous	Highest conc	Urban	
	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	PM2.5 FRM -Colo	Gravimetric	1 in 3 day	Population	Neighborhood	Site to move temporarily
				PM2.5 Thermo Sharp	Beta attenuation	Continuous	Population	Neighborhood	
				Chem speciation	Ion Chromatograph	1 in 6 day	SIP information		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
39-113-0034	117 S. Main St., Dayton	39.757837	-84.191667	Carbon monoxide	Infrared	Continuous	Highest conc	Microscale	
39-113-0037	1401 Harshman Rd., Dayton	39.7863	-84.1337	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-113-7001	2728 Viking Lane, Moraine	39.71451	-84.21798	PM10 -Colo	Gravimetric	1 in 6 day	Highest conc	Neighborhood	
				TSP-Pb,metals-Colo	ICP	1 in 6 day	Source oriented	Neighborhood	

Lake Co.	Geauga Co.								
39-055-0004	Notre Dame School, Munson	41.51551	-81.249906	Ozone	U.V. Photometric	Continuous	Population	Urban	
	Lake Co.								
39-085-0003	Jefferson School, Eastlake	41.673006	-81.422455	Sulfur dioxide	Pulsed Fluorescence	Continuous		Neighborhood	
				Ozone	U.V. Photometric	Continuous	Highest conc.	Neighborhood	
39-085-0006	8443 Mentor Ave., Mentor	41.666886	-81.338781	Carbon monoxide	Infrared	Continuous	Highest conc.	Microscale	
39-085-0007	177 Main St., Painesville	41.726811	-81.242156	PM2.5SeqFRMColo	Gravimetric	1 in 3 day	Highest conc.	Urban	
				PM2.5 TEOM FDMS	Oscillating crystal	Continuous	Highest conc.	Urban	AQI
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Source-oriented	Middle	
				Ozone	U.V. Photometric	Continuous	Highest conc.	Urban	
39-085-1001	Fairport High School, Fairport	41.75489	-81.273076	PM10-Colo	Gravimetric	1 in 6 day	Highest conc.	Neighborhood	Complaint area
Portsmouth	Adams Co.								
39-001-0001	Adams Cnty Hospital, W.Union	38.794667	-83.533988	PM2.5 TA-BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
				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	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	
				PM2.5 Seq. FRM	Gravimetric	1 in 3 day	Population	Neighborhood	
				PM2.5 TA-BAM	Beta attenuation	Continuous	Population	Neighborhood	AQI
				Chem Spec	Ion Chromatograph	1 in 6 day	SIP information		
				URG-3000	Carbon speciation	1 in 6 day	SIP information		
				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	PM10-Colo	Gravimetric	1 in 6 day	Highest conc.	Middle	
				PM2.5 SeqFRMColo	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	PM10	Gravimetric	1 in 6 day	Population	Neighborhood	
39-145-0020	2840 Back Rd.FranklinFurnace	38.609338	-82.822512	PM10 TEOM	Oscillating crystal	Continuous	Population	Neighborhood	Required by permit
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Population	Neighborhood	Required by permit
				VOCs	GC-MS	1 in 12 day			Expected to end in 2014
39-145-0021	2446GalliaPike, FranklnFurnac	38.600611	-82.829782	PM10 TEOM	Oscillating crystal	Continuous	Background	Neighborhood	Required by permit
				VOCs	GC-MS	1 in 12 day			Expected to end in 2014

39-145-0022	1740GalliaPike,FranklnFurnac	38.588034	-82.834973	PM10 TEOM	Oscillating crystal	Continuous	Background	Neighborhood	Required by permit
				Sulfur dioxide	Pulsed Fluorescence	Continuous	Background	Neighborhood	Required by permit
				VOCs	GC-MS	1 in 12 day			Expected to end in 2014
CDO	Delaware Co.								
39-041-0002	359 Main Rd., Delaware Franklin Co.	40.356694	-83.063971	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-049-0005	1585 Morse Rd., Columbus	40.060124	-82.976857	Carbon Monoxide	Infrared	Continuous	Highest conc.	Middle	
39-049-0024	State Fairgrounds, Columbus	39.99875	-82.99344	PM10-Colo PM2.5 Seq. FRM	Gravimetric Gravimetric	1 in 6 day 1 in 3 day	Highest conc. Population	Neighborhood Neighborhood	
39-049-0025	580 E. Woodrow Av. Columbus	39.92843	-82.98098	PM2.5 FRM -Colo TSP-lead-metals	Gravimetric ICP	1 in 3 day	Highest conc.	Neighborhood Neighborhood	
39-049-0029	New Albany HS, New Albany	40.0845	-82.81552	PM2.5 BAM Ozone	Oscillating crystal U.V. Photometric	Continuous Continuous	Population Highest conc.	Neighborhood Neighborhood	AQI
39-049-0034	State Fairgrounds, Korbel Ave.	40.002734	-82.994404	PM2.5 TEOM VOCs Sulfur dioxide	Oscillating crystal GC MS Pulsed Fluorescence	Continuous 1 in 12 day Continuous	Population Population	Neighborhood	AQI PWEI site
39-049-0037	Franklin Park, Broad St.	39.96523	-82.95549	Ozone NO2	U.V. Photometric Chemiluminescence	Continuous Continuous	Population Population	Neighborhood Neighborhood	
39-049-0038	Smokey Row Rd.	40.1111	-83.06545	NO2 Carbon monoxide	Chemiluminescence Infrared	Continuous Continuous	Highest conc. Highest conc.	Microscale Microscale	Near-road NO2 site Add black carbon, BAM
39-049-0081	Fire Station, Maple Canyon	40.0877	-82.959773	Ozone PM2.5 Seq. FRM Chemical speciation URG-3000	U.V. Photometric Gravimetric Ion Chromatograph Carbon speciation	Continuous 1 in 3 day 1 in 6 day 1 in 6 day	Highest conc. Highest conc. SIP information SIP information	Urban Neighborhood	
39-083-0002	Water Plant , Centerburg Licking Co.	40.310025	-82.691724	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-089-0005	Heath School, Heath Madison Co.	40.026037	-82.433	Ozone	U.V. Photometric	Continuous	Population	Urban	
39-097-0007	Madison High School, London	39.78819	-83.47606	Ozone	U.V. Photometric	Continuous	Population	Urban	

PM2.5 is particulate matter 2.5 millionths of a meter in diameter or smaller. PM10 is fine particulate matter and PM2.5 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.

PM2.5 Seq. FRM samplers test for PM2.5 and can hold multiple samples for Sequential sampling. They are Federal Reference Method (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 PM2.5 samples that are analyzed for the chemical speciation make-up of the PM2.5 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 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 PM2.5 aids helps to determine what control measures and plans will best control fine particulates.

Ohio Air Monitoring Agencies

<p>Akron Regional Air Quality Management District 146 South High 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, Darke, 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>

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Ohio EPA Southeast District Office 2195 Front St. Logan, Ohio 43138 (740) 385-8501	Ohio EPA Southwest District Office 401 East Fifth St. Dayton, Ohio 45402-2911 (937) 285-6357