

Kentucky Air Quality Surveillance Network 2006



Commonwealth of Kentucky
Environmental & Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601



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INTRODUCTION

The State Division for Air Quality has operated an air quality-monitoring network in the Commonwealth since July 1967. The Louisville Metro Air Pollution Control District, a local agency, has maintained a subnetwork in its area of jurisdiction since January 1956. Since that time the networks have been expanded in accordance with the U. S. Environmental Protection Agency's regulations to reflect the current overall network of 44 stations, which monitor the major pollutants including those for which national ambient air quality standards have been issued.

In October 1975, the U. S. EPA established a work group to critically review and evaluate current air monitoring activities at that time. This group was named the Standing Air Monitoring Working Group (SAMWG). The SAMWG review indicated several areas where deficiencies existed which needed correction. The principal areas needing correction were: there were more monitoring sites than needed in some areas to assess air quality; existing regulations did not allow for flexibility to conduct special purpose monitoring studies; data reporting was untimely and incomplete and there existed a lack of uniformity in station location and probe siting, sampling methodology, quality assurance practices, and data handling procedures which resulted in data of unknown quality.

In August 1978, recommendations developed by SAMWG to remedy the deficiencies in the existing monitoring activities were combined with the requirements of a new Section 319 of the Clean Air Act and included in a proposed revision to the Regulations. Section 319 provided for the development of uniform air quality monitoring criteria and methodology; reporting of a uniform air quality index in major urban areas; and the establishment of an air quality monitoring system nationwide which utilizes uniform monitoring criteria and provides for monitoring stations in major urban areas that supplement State monitoring.

In May 1979 the new regulations were finalized by the Federal Environmental Protection Agency requiring certain modifications and additions be included in the State Implementation Plan for air quality surveillance. These regulations require each state to operate a network of monitoring stations designated as State and Local Air Monitoring Stations (SLAMS) that measure ambient concentrations of air pollutants for which standards have been established. The SLAMS designation contains provisions concerning the conformity to specific siting and monitoring criteria not previously required. Regulations provide for an annual review of the monitoring network to insure objectives are being met and to identify needed modification. Finally, the Air Quality Surveillance Plan content provides for having a SLAMS network description available for public inspection and submission to the U.S. Environmental Protection Agency upon request.

The SLAMS network description as provided for in 40 CFR Part 58 must contain the following information for each monitoring station in the network:

1. The Aerometric Information Retrieval System (AIRS) site identification form for existing stations.
2. The proposed location for scheduled stations.
3. The sampling and analysis method used by each monitor.

4. The operating schedule for each monitor.
5. The monitoring objective and spatial scale of representativeness for each monitor.

The document which follows constitutes the Kentucky SLAMS network description and is organized into three main parts:

- (1) **Station Description Format:** An outline of the designations, parameters, monitoring methods, and the basis for site selection.
- (2) **Network Summaries:** Presenting the total number of sites and monitors in each region and for the state. Also included is a listing of all stations and location.
- (3) **SLAMS Station Description:** Each SLAMS station is described in detail as per the outline in (1) above.

Modification to the network as determined by an annual review process will be made each year to maintain a current up-to-date network description document.

STATION DESCRIPTION FORMAT

AQS Site Identification Information

Pertinent, specific siting information for each site and monitor is stored in the U.S. EPA's AQS data system. This information includes the exact location of the site, local and regional population, description of the site location, monitor types, and monitoring objectives. This site and monitor information is routinely updated whenever there is a change in site characteristics or pollutants monitored.

The network station descriptions contained in this document include the following information.

1. Monitoring Stations Designations

Most stations described in the air quality surveillance network are designated as "SLAMS". In addition, some of these stations fulfill other requirements, which must be identified. In this description of the network, designations are also made for National Air Monitoring Stations (NAMS), Special Purpose Monitors (SPM), Emergency Episode Monitoring sites and Air Quality Index sites (AQI). The following is the criteria used for each of these designations.

SLAMS: Requirements for air quality surveillance systems provide for the establishment of a network of monitoring stations designated as State and Local Air Monitoring Stations (SLAMS) that measure ambient concentrations of those pollutants for which standards have been established. These stations must meet requirements that relate to four major areas: quality assurance, monitoring methodology, sampling interval and siting of instruments and instrument probes.

NAMS: Within the SLAMS network certain monitors are selected to provide the U.S. EPA with timely data for use in national trends analysis. These NAMS monitors are identified in the summary of network stations.

EMERGENCY EPISODE MONITORING SITES: Regulations provide for the operation of at least one continuous SLAMS monitor for each major pollutant in designated locations for emergency episode monitoring. These monitors are placed in areas of worst air quality and provide continual surveillance during episode conditions.

AIR QUALITY INDEX: Certain stations in the SLAMS network provide data for daily index reporting. Index reporting is required for all urban areas with a population exceeding 200,000. The Division for Air Quality, however, is providing this service to the general public from all areas where monitoring and attending staff are available. The Air Quality Index is a method of reporting that converts concentration levels of pollution to a simple number on a scale of 0-500. Intervals on the Air Quality Index scale are related to potential health effects of the daily measured concentrations of the major pollutants. The Division for Air Quality prepares the Index twice daily for release to the public from the pollutant data reported from the Field Offices.

SPM: Not all monitors and monitoring stations in the air quality surveillance network are

included in the SLAMS network. In order to allow the capability of providing monitoring for complaint studies, modeling verification and compliance status, certain monitors are reserved for short-term studies and designated as Special Purpose Monitors (SPM). These monitors are not committed to any one location or for any specified time period. They may be located as separate monitoring stations or be included at SLAMS locations. Monitoring data may be reported providing the monitors and stations conform to all requirements of the SLAMS network.

2. Date Established

The date when each existing monitoring station was established is shown in the description. For those stations, which are proposed, a date is provided when it is expected for the station to be in operation.

3. Site Description

Specific information is provided to show the location of the monitoring equipment at the site and to indicate that monitors and monitor probes conform to the siting criteria.

4. Monitoring Methods

Sampling and analytical procedures used in the air-monitoring network conform to Federal reference (FRM), Federal alternate (FAM), Federal equivalent (FEM), or EPA Compendium methods. In case there is no federal method, procedures are described in the Kentucky Air Quality Monitoring and Quality Assurance Manuals.

(a) Particulate Matter 10 microns in size (PM₁₀)

PM₁₀ samplers operated by the Division for Air Quality are certified as either Federal Reference Method (FRM) or Federal Equivalent Method (FEM) samplers and are operated per the requirements set forth in 40 CFR 50. Intermittent samplers collect a 24-hour sample every sixth day on 46.2 mm PTFE filters. The filter is weighed before and after the sample run. The gain in weight in relation to the volume of air sampled is calculated in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The PTFE filters are to be equilibrated before each weighing for 24 hours at 20-23 degrees centigrade (C) mean temperature and 30-40 % mean humidity.

Continuous PM₁₀ samplers provide 24-hour samples daily for SLAMS reporting. During sampling, ambient air passes through an inlet designed to pass only particles smaller than 10 microns in diameter. After exiting the inlet, the sample stream is sent to a mass transducer. Inside the transducer the sample stream passes through a teflon-coated glass fiber filter. This filter is weighed every two seconds. The difference between the current filter weight and the initial or installed weight gives the total mass of the collected particulate. The mass concentration is computed by dividing the total mass by the flow rate. The method is referred to as TEOM. Data is transmitted by telemetry for entry into the automated central data acquisition system and is stored as 1-hour averages in ($\mu\text{g}/\text{m}^3$).

(b) Particulate Matter 2.5 microns in size (PM_{2.5})

With the exception of continuous samplers all PM_{2.5} samplers operated by the Division for Air Quality are certified as either FRM or FEM samplers. All samplers are operated per the requirements set forth in 40 CFR 50, Appendix L. Samples are collected on 46.2mm PTFE filters over a 24-hour sampling period. Air flow through the filter is to be maintained at 16.7 liters per minute. The flow rate must not vary more than +/-5% for five minutes over a 24-hour sample period at actual ambient temperature and pressure. Samples must be retrieved within 96 hours of the end of the sample run and must be kept cool (4 degrees C or cooler) during transit to meet the thirty-day limit for re-weighing.

The PTFE filters are to be equilibrated before each weighing for 24 hours at a controlled atmosphere of 20-23 degrees C mean temperature and 30-40% mean humidity. Filters must be used within thirty days of initial weighing. Filters must be re-weighed within thirty days of the end of the sample run and must be kept at 4 degrees C or cooler. The gain in weight in relation to the volume of air sampled is calculated in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and reported as a 24-hour average.

Continuous PM_{2.5} samplers provide 24-hour samples daily for Air Quality Index reporting. During sampling, ambient air passes through an inlet and sharp cut cyclone designed to pass only particles smaller than 2.5 microns in diameter. After exiting the inlet, the sample stream is sent to a mass transducer. Inside the transducer the sample stream passes through a teflon-coated glass fiber filter. This filter is weighed every two seconds. The difference between the current filter weight and the initial or installed weight gives the total mass of the collected particulate. The mass concentration is computed by dividing the total mass by the flow rate. The method is referred to as TEOM. Data is transmitted by telemetry for entry into the automated central data acquisition system and is stored as 1-hour averages in ($\mu\text{g}/\text{m}^3$).

(c) PM_{2.5} Speciation sampling and analysis

In addition to operating PM_{2.5} samplers that determine only PM_{2.5} mass values, the Division also operates PM_{2.5} speciation samplers that collect samples that are analyzed to determine the chemical makeup of PM_{2.5}. Samples are collected on a set of three filters over a 24-hour sampling period. The individual filters are composed of different media in order to collect specific types of toxic pollutants.

After collection, the samples are shipped in ice chests to an EPA contract laboratory for analysis. At the laboratory the samples are analyzed using optical and electron microscopy, thermal optical analysis, ion chromatography and x-ray fluorescence to determine the presence and level of specific toxic compounds. Sample results are entered in the AQS data system as 24-hour averages in ($\mu\text{g}/\text{m}^3$).

(d) Sulfur Dioxide

The instruments used to continuously monitor sulfur dioxide levels in the atmosphere are designated as Automated Equivalent Methods (AEM) and employ the UV

fluorescence technique. The continuous data output from the instrument is transmitted by telemetry for entry into an automated central data system. The data is reported as hourly averages in parts-per-million (ppm).

Calibration of these instruments is done dynamically using certified gas mixtures containing a known concentration of sulfur dioxide gas. This gas is then diluted in a specially designed apparatus to give varying known concentrations of sulfur dioxide. These known concentrations are supplied to the instruments, which are adjusted so that instrument output corresponds with the specific concentrations. Calibration curves are prepared for each instrument and each data point is automatically compared to this curve before entry into the data acquisition system.

(e) Carbon Monoxide

The instruments used to monitor for carbon monoxide are designated as Automated Reference Methods (ARM) and use the non-dispersive infrared correlation technique. Data is transmitted by telemetry for entry in an automated central data acquisition system. The data is reported as hourly averages in (ppm).

Calibration of the instrument is performed periodically by using nitrogen or zero air to establish the zero baseline and NBS or NBS traceable gas mixtures of carbon monoxide in air. The span is checked daily using a certified mixture of compressed gas containing approximately 45 parts per million carbon monoxide.

(f) Ozone

The instruments used to monitor for ozone are designated as Automated Equivalent Methods (AEM) and use the UV photometry technique. The continuous data output from the instrument is transmitted by telemetry for entry into an automated central data acquisition system. The data is reported as hourly averages in (ppm).

Monitors are calibrated routinely using an ozone generator, which is calibrated using the ultra violet photometry reference method. Calibration curves are prepared for each instrument and each data point is automatically compared to this curve before entry into the data acquisition system.

(g) Nitrogen Dioxide

The instruments used to monitor for nitrogen dioxide are designated as Automated Reference Methods (ARM) and use the chemiluminescence technique. The continuous data output from the instrument is transmitted by telemetry for entry into an automated central data acquisition system. The data is reported as hourly averages in (ppm).

Calibration of these instruments is done dynamically using NBS certified gas mixtures of nitric oxide. Through the use of dilution apparatus, varying concentrations are produced which are supplied to the monitors, thus producing a specific calibration curve for each instrument. Each data point is automatically

compared to this curve before entry into the data acquisition system.

(h) Lead

Lead concentrations are determined from the analysis of suspended particulate collected by high volume particulate samplers. Particulate samples are ashed to remove organic matter and acid extracted to dissolve the metals. Analysis of the lead content is determined by the atomic absorption spectroscopy method. This technique is designated as a Federal Reference Method. The data is reported as quarterly averages in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

(i) Mercury

Cold vapour atomic fluorescence spectrometry (CVAFS) is used to determine total gaseous mercury in ambient air at sub- ng/m^3 levels. The analyzer uses a dual, ultra pure gold absorbent, cartridge design that allows alternating desorption and sampling. Thus, resulting in continuous mercury sampling of the air stream. The continuous data output from the instrument is transmitted by telemetry for entry into an automated central data acquisition system. The data is reported as hourly averages in nanograms per cubic meter (ng/m^3).

(j) Air Toxics

Air toxic concentrations are measured depending on the chemical properties of the pollutant to be monitored. Currently the Division has the capability to sample for air toxics in three categories: Metals, Volatile Organic Compounds (VOCs) and Carbonyls (aldehydes and ketones).

Metals samples are collected using EPA Compendium Method IO-3.4 *Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma (ICP) Spectroscopy*. Using this method samples are collected on 46.2 mm PTFE filters over a 24-hour period as in the PM_{10} monitoring method. The filter is weighed before and after the sample run. The gain in weight in relation to the volume of air sampled is calculated in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The PTFE filter is to be equilibrated before each weighing for 24 hours at 20-23 degrees C mean temperature and 30-40 % mean humidity. The filter is then delivered to the Division for Environmental Services for analysis by an inductively coupled plasma/mass spectrometer to determine the concentration of metals in ($\mu\text{g}/\text{m}^3$).

VOC samples are collected using EPA Compendium Method TO-15 *Determination of Volatile Organic compounds in Air Collected in Specially Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*. Using this method, ambient air flows into a specially coated stainless steel canister for a 24-hour sampling period. The sample is shipped to the Division for Environmental Services for analysis by gas chromatography/mass spectrometer. VOC concentrations determined in the sample are reported in ($\mu\text{g}/\text{m}^3$).

Carbonyl samples are collected using EPA Compendium Method TO-11A

Determination of Formaldehyde in Ambient Air Using Adsorbent Cartridges Followed by High Performance Liquid Chromatography. Using this method an ambient air stream flows through a cartridge coated with 2,4 dinitrophenylhydrazine (DNPH) at a (1) liter per minute flow rate for a 24-hour sampling period. The cartridge is packed on ice and shipped to the Division for Environmental Services for analysis by high-pressure liquid chromatography. Carbonyl concentrations determined in the sample are reported in ($\mu\text{g}/\text{m}^3$).

5. Area Representativeness

Each station in the monitoring network must be described in terms of the physical dimensions of the air parcel nearest the monitoring station throughout which actual pollutant concentrations are reasonably similar. Area dimensions or scales of representativeness used in the network description are:

- (a) Micro Scale - defines the concentration in air volumes associated with area dimensions ranging from several meters up to about 100 meters.
- (b) Middle Scale - defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometers.
- (c) Neighborhood Scale - defines concentrations within an extended area of a city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers.
- (d) Urban Scale - defines an overall citywide condition with dimensions on the order of 4 to 50 kilometers.
- (e) Regional Scale - defines air quality levels over areas having dimensions of 50 to hundreds of kilometers.

Closely associated with the area around the monitoring station where pollutant concentrations are reasonably similar are the basic monitoring objectives of the station. There are four basic objectives included in this description:

- (a) To determine the highest concentrations expected to occur in the area covered by the network.
- (b) To determine representative concentrations in areas of high population density.
- (c) To determine the impact on ambient pollution levels of significant sources or source categories.
- (d) To determine general background concentration levels.

The design intent in siting stations is to correctly match the area dimensions represented by the sample of monitored air with the area dimensions most appropriate for the monitoring objective of the station. The following relationship of the four basic objectives and the area of representativeness are appropriate when siting monitoring stations:

Monitoring Objectives

Highest concentration

Population

Source impact

General/background

Siting Area Scale

Micro, middle, neighborhood

Neighborhood, urban

Micro, middle, neighborhood

Neighborhood, regional

6. Monitoring Objectives

The monitoring network was designed to provide information to be used as a basis for the following actions:

- (a) To determine compliance with ambient air quality standards and to plan measures to attain these standards.
- (b) To activate emergency control procedures in the event of an impending air pollution episode.
- (c) To observe pollution trends throughout a region including non-urban areas and report progress made toward meeting ambient air quality standards.
- (d) To provide a database for the evaluation of the effects of air quality on population, land use, and transportation planning. To provide a database for the development and evaluation of diffusion models.

7. Site Approval Status

Each monitoring station in the existing network has been reviewed with the purpose of determining whether it meets all design criteria for inclusion in the SLAMS network. Stations that do not meet the criteria will either be relocated in the immediate area or when possible, re-sited at the present location.

8. Quality Assurance Status

The Division for Air Quality has an extensive quality assurance program to ensure that all air monitoring data collected is accurate and precise. Staff members audit air monitors on a scheduled basis including those operated by the Louisville Metro Air Pollution Control District to ensure that each instrument is in calibration and operating properly. Data validation is performed monthly by verifying the data reported by each instrument is recorded accurately in the computerized database.

9. Data Processing and Reporting

All ambient air quality data are stored in a centralized computer located at the Division for Air Quality headquarters in Frankfort. After each month of data has passed all quality assurance checks it is transmitted via telemetry to the U.S. EPA's national data storage system known as AQS (Air Quality System). Statistical data summaries are generated from this database and compiled to produce Ambient Air Quality Annual Reports. These reports

may be accessed at the Division for Air Quality website: <http://www.air.ky.gov>. The report is located under **Public Information**. The public may also access summaries of the data at EPA's AirData website (<http://www.epa.gov/air/data/index.html>).

**AIR QUALITY SURVEILLANCE NETWORK
AIR MONITORING STATIONS SUMMARY**

Region	Number of Sites	PM _{2.5}	PM ₁₀	SO ₂	NO ₂	CO	O ₃	Metals	Hg	Wet Dep	VOC	Carbonyl	Speciation	MET
Appalachian	3	5 ^{CT}	2 ^{C**}	0	0	0	3	2 ^C	0	0	2 ^D	2 ^D	1	2
Ashland-Huntington	4	3 ^T	2 ^C	2	1	0	3	0	1	1	1	1	1	2
Bluegrass	6	5 ^T	1 ^{**}	2	1	0	3 ^N	1	1	0	2	1	1	1
Cincinnati-Northern Kentucky	3	3 ^T	0	2	1	0	3	0	1	0	1	1	1	2
Louisville	9	9 ^{CT}	3 ^{CT}	2 ^N	1	2 ^N	3 ^N	0	0	0	6 ^{UL}	0	1	1
North Central	3	3 ^T	1 ^T	0	1	0	3	0	0	0	0	0	0	1
Owensboro-Henderson	4	6 ^{CT}	1 ^T	3	2	0	4	1	1	1	1	1	0	2
Paducah-Cairo	8	3 ^T	2 ^{**}	2	1	0	2	1	1	0	5 ^C	0	0	2
South Central	4	3 ^{CT}	0	1	1	0	3	0	1	0	0	0	0	2
TOTALS	44	40	12	13	9	2	27	5	6	2	18	6	5	15
SLAMS (NAMS)		19	5 ^N	9 ^N	6	2 ^N	17 ^N	0	0	0	0	0	0	0
Special Purpose/Other		9	2	4	3	0	10	5 ^{**}	0	2	18 ^{DC}	6 ^D	5	15
AQI		7 ^T	3	7 [*]	0	2 [*]	9 [*]	0	0	0	0	0	0	0
Not Reported in AQS		5 ^{CT}	2 ^C	0	0	0	0	0	6	0	0	0	0	0

^C=Collocated monitors; ^D=Duplicate monitors; ^T=TEOM_{2.5} continuous PM_{2.5} monitors or TEOM₁₀ continuous PM₁₀ monitors; UL=Monitors are operated by the University of Louisville; *=Monitors are counted as a SLAMS but also report to AQI; **=Multiple analysis: PM₁₀ Teflon filters used for PM₁₀ monitoring and Metals monitoring; ^N=NAMS (PM₁₀ NAMS in Ashland and Louisville=2sites; SO₂ NAMS in Louisville=1 site; CO NAMS in Louisville=1 site; O₃ NAMS in Bluegrass=2 sites; O₃ NAMS in Louisville =1

SLAMS - State and Local Air Monitoring Stations (SLAMS) are located in all areas where the state and the U.S. EPA Regional Office decide that monitoring is necessary to determine compliance with National Ambient Air Quality standards.

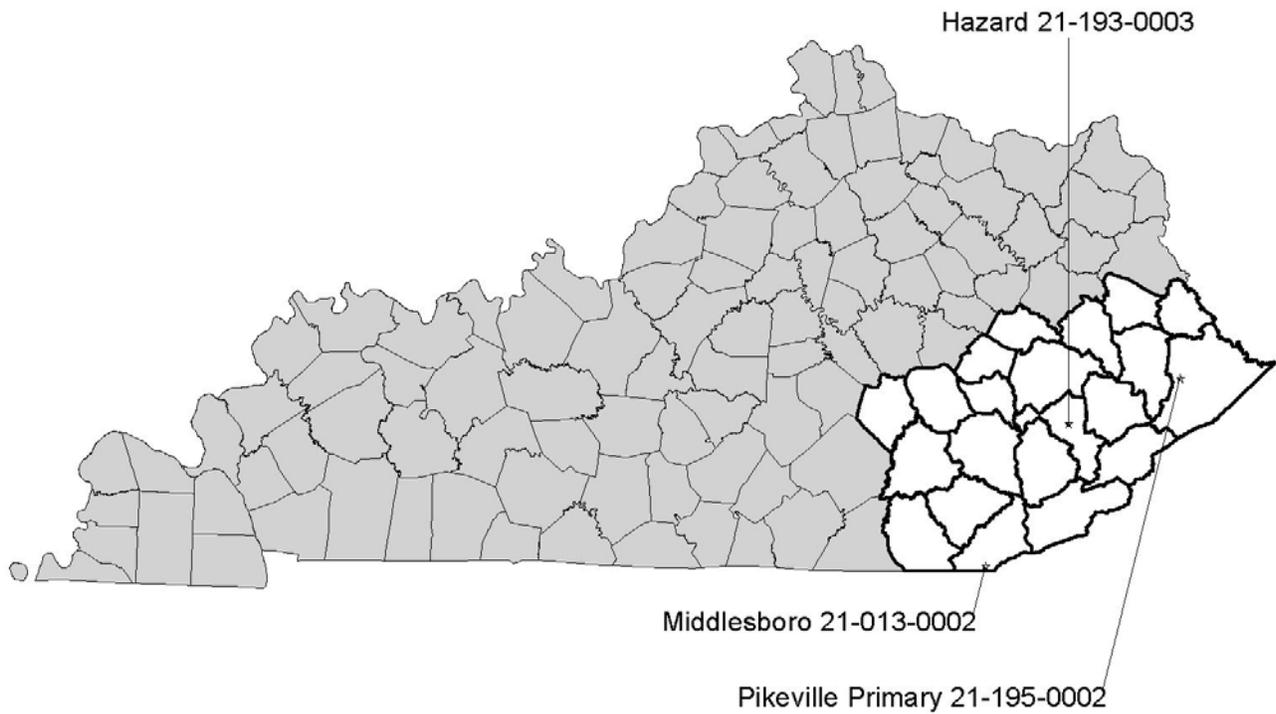
NAMS - Within the SLAMS network certain monitors are designated as National Air Monitoring Stations (NAMS) to provide the U.S. EPA with data for use in national trends analysis. The number of NAMS monitors appears in parenthesis next to the SLAMS totals.

SPM - Special Purpose Monitors are oriented toward localized problems, occasionally prompted by citizen complaints and do not represent overall air quality in cities or counties. Data from these monitors should not be used for planning purposes.

AQI - Within the Air Quality Surveillance Network certain monitors provide daily data for the Air Quality Index (AQI). The Division for Air Quality provides this service not only to the EPA required urban areas with a population in excess of 200,000 but to the general public where monitoring and staff are available.

Not Reported - Data from monitors that are classified as collocated, duplicate, or a non-regulated method is not reported to the USEPA's database.

Appalachian Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb-onyl	Specia-tion	MET
21-013-0002	Airport, 34th & Dorchester Middlesboro (Bell)	X(s)					X(s)							X
21-193-0003	Perry County Horse Park Hazard (Perry)	X(s)	X(c)				X(s)	X(cs)			X(cs)	X(cs)	X(s)	X
21-195-0002	101 N. Mayo Trail, DOT Office Pikeville (Pike)	X(ct)					X(s)							
TOTAL		5	2	0	0	0	3	2	0	0	2	2	1	2

- (c) Collocated Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Middlesboro
(City)

Bell
(County)

Middlesboro Airport
(Address)

EPA SITE NO: 21-013-0002

REGION: (101) Appalachian

MAP LOCATION: UTM ZONE 17 **NORTHING** 4054.730 **EASTING** 254.269

DESIGNATION: SPM - Special Purpose Monitoring Station

ESTABLISHED: February 14, 1992

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the Middlesboro Airport. The sample inlets are 13 feet above ground level and 55 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every sixth day. Analysis is gravimetric.

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and transportation levels on a regional scale for ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

To provide information on the transport of ozone into the region.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Hazard (City)	Perry (County)	Perry County Horse Park (Address)
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EPA SITE NO: 21-193-0003

REGION: (101) Appalachian

MAP LOCATION: **UTM ZONE** 17 **NORTHING** 4128.405 **EASTING** 303.165

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Ozone, PM_{2.5})
EPISODE - Emergency Episode Monitoring Site
NATTS-National Air Toxics Trends Station

ESTABLISHED: April 1, 2000

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the Perry County Horse Park. The sample inlet is 15 feet above ground level and 65 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM₁₀ sampler and a collocated sampler operate for 24-hours every sixth day. Analysis is gravimetric. Metals are determined from the PM₁₀ sample using EPA Method IO 3.4.

A FRM PM_{2.5} sampler operates for 24-hours every sixth day. Analysis is gravimetric

A PM_{2.5} speciation sampler operates for 24-hours every sixth day. The samples are analyzed using microscopy, thermal optical analysis, ion chromatography, and X-ray fluorescence.

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry

A Volatile Organics Compound sampler operates for 24-hours every sixth day using EPA Method TO-15.

A Carbonyls sampler operates for 24-hours every sixth day using EPA Method TO-11A.

A Hexavalent Chrome sampler operates for 24-hours every sixth days using the CARB Method.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, barometric pressure, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale and regional scale background for air toxics

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect elevated pollutant levels for activation of emergency control procedures for ozone. To measure rural concentrations of a sub-group of air toxics for use in national assessments.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Pikeville (City)	Pike (County)	DOT District Office, 101 North Mayo Trail (Address)
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EPA SITE NO: 21-195-0002

REGION: (101) Appalachian

MAP LOCATION: UTM ZONE 17 **NORTHING** 4149.325 **EASTING** 364.270

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Ozone, PM_{2.5} continuous)
AQI - Air Quality Index Site
EPISODE - Emergency Episode Monitoring Site

ESTABLISHED: May 1, 1994

SITE DESCRIPTION:

The site is a stationary equipment shelter located behind the DOT District Office building. The sample inlets are 13 feet above ground level and 115 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day while a collocated FRM PM_{2.5} sampler operates for 24-hours every sixth day. Analysis is gravimetric.

A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM Method.

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and on an urban scale for ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

To provide pollutant levels for daily index reporting. To detect elevated pollutant levels for activation of emergency control procedures for particulates.

SITE APPROVAL STATUS:

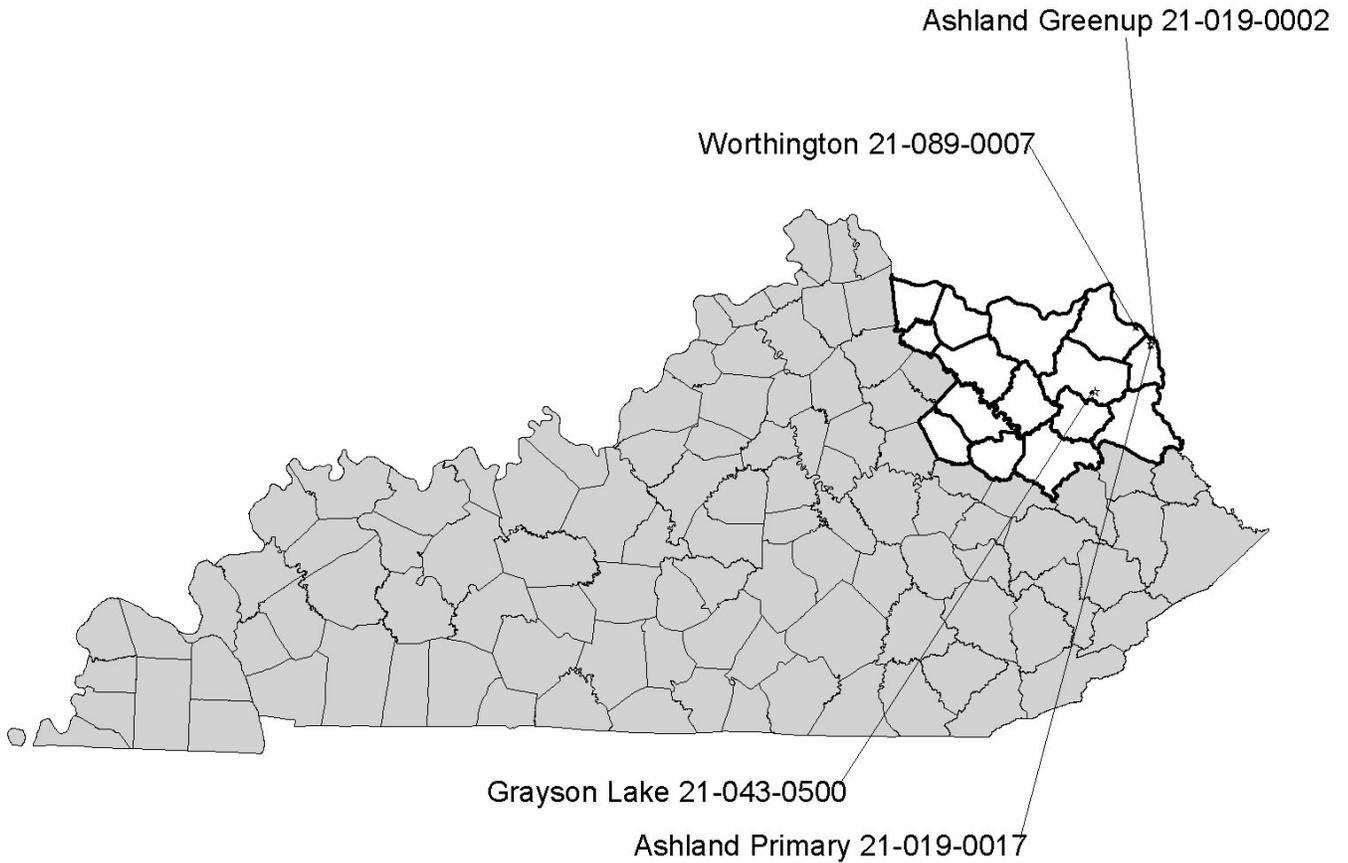
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Ashland-Huntington Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb-onyl	Speciation	MET
21-019-0002	21st & Greenup Ashland (Boyd)		X(cN)					X						
21-019-0017	2924 Holt St, FIVCO Health Dept Ashland (Boyd)	X(I)		X(eI)	X(e)		X(eI)				X(s)	X(s)	X(s)	X
21-043-0500	Camp Webb, Grayson Lake Grayson (Carter)	X					X(s)		X	X				X
21-089-0007	Water Tower, Scott & Center Sts. Worthington (Greenup)			X(s)			X							
TOTAL		3	2	2	1	0	3	0	1	1	1	1	1	2

- (c) Collocated Monitor
- (e) Emergency Episode Monitor
- (I) Air Quality Index Monitor
- (N) National Air Monitoring Station (NAMS) Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Ashland (City)	Boyd (County)	21 st and Greenup Streets (Address)
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EPA SITE NO: 21-019-0002

REGION: (103) Ashland-Huntington

MAP LOCATION: UTM ZONE 17 **NORTHING** 4259.765 **EASTING** 357.690

DESIGNATION: SLAMS - State and Local Air Monitoring Station
NAMS - National Air Monitoring Station
SPM-Special Purpose Monitor (Air Toxics)

ESTABLISHED: April 2, 1978

SITE DESCRIPTION:

The site is located on the west end of the one-story roof of the building. The sample inlet is 19 feet above ground level and 100 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM₁₀ sampler operates for 24-hours every sixth day. Analysis is gravimetric.
A duplicate FRM PM₁₀ sampler also operates for 24-hours every sixth day. Analysis is gravimetric
Metals are determined from the PM₁₀ sample using EPA Method IO 3.4.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on a middle scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To observe pollution trends and provide information for national data analysis.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 2/22/05)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Ashland (City)	Boyd (County)	FIVCO Health Dept., 2924 Holt Street (Address)
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EPA SITE NO: 21-019-0017

REGION: (103) Ashland-Huntington

MAP LOCATION: **UTM ZONE** 17 **NORTHING** 4257.830 **EASTING** 356.855

DESIGNATION: SLAMS - State and Local Air Monitoring Station
EPISODE - Emergency Episode Monitoring Site
SPM-Special Purpose Monitors (Air Toxics)
AQI - Air Quality Index site

ESTABLISHED: January 1, 1999

SITE DESCRIPTION:

The site is a stationary equipment shelter located on a grass covered open area behind the health department building. The sample inlets are 13 feet above ground level and 240 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
A PM_{2.5} speciation sampler operates 24-hours every sixth day. The samples are analyzed using microscopy, thermal optical analysis, ion chromatography, and X-ray fluorescence.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.
A Volatile Organics Compound sampler operates for 24-hours every sixth day using EPA Method TO-15.
A Carbonyls sampler operates for 24-hours every sixth day using EPA Method TO-11A.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates, sulfur dioxide and ozone and on an urban scale for nitrogen dioxide.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect episode levels for activation of emergency control procedures. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Grayson
(City)

Carter
(County)

Camp Webb, Grayson Lake
(Address)

EPA SITE NO: 21-043-0500

REGION: (103) Ashland-Huntington

MAP LOCATION: UTM ZONE 17 **NORTHING** 4233.922 **EASTING** 325.984

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitors (Ozone, Mercury)

ESTABLISHED: May 13, 1981

SITE DESCRIPTION:

The site is a stationary equipment shelter in a fenced area located in a remote section of the park. The sample inlets are 13 feet above ground level. A service road is the only roadway near the site. The meteorological tower is 10 meters.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric.

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

A Total Mercury monitor operates continuously using the CVAFS method.

A wet deposition sampler operates when activated by a rain motion sensor. Rain samples are collected weekly and shipped to the Environmental Services Laboratory in Frankfort for analysis. Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, rainfall, and temperature.

AREA REPRESENTATIVENESS:

The site represents background levels on an urban scale.

MONITORING OBJECTIVES:

To determine background levels of PM_{2.5}. To judge compliance with and/or progress made toward meeting ambient air quality standards. To provide ozone data upwind of the Ashland area. To measure background levels of Mercury in ambient air and Mercury in precipitation.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Worthington (City)	Greenup (County)	Scott Street & Center Avenue (Address)
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EPA SITE NO: 21-089-0007

REGION: (103) Ashland-Huntington

MAP LOCATION: UTM ZONE 17 **NORTHING** 4267.850 **EASTING** 349.100

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Sulfur dioxide)

ESTABLISHED: October 12, 1980

SITE DESCRIPTION:

The site is located in a stationary equipment shelter at the water tower near the intersection of Scott Street and Center Avenue. The sample inlets are 13 feet above ground level and 57 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry. An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for sulfur dioxide and ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

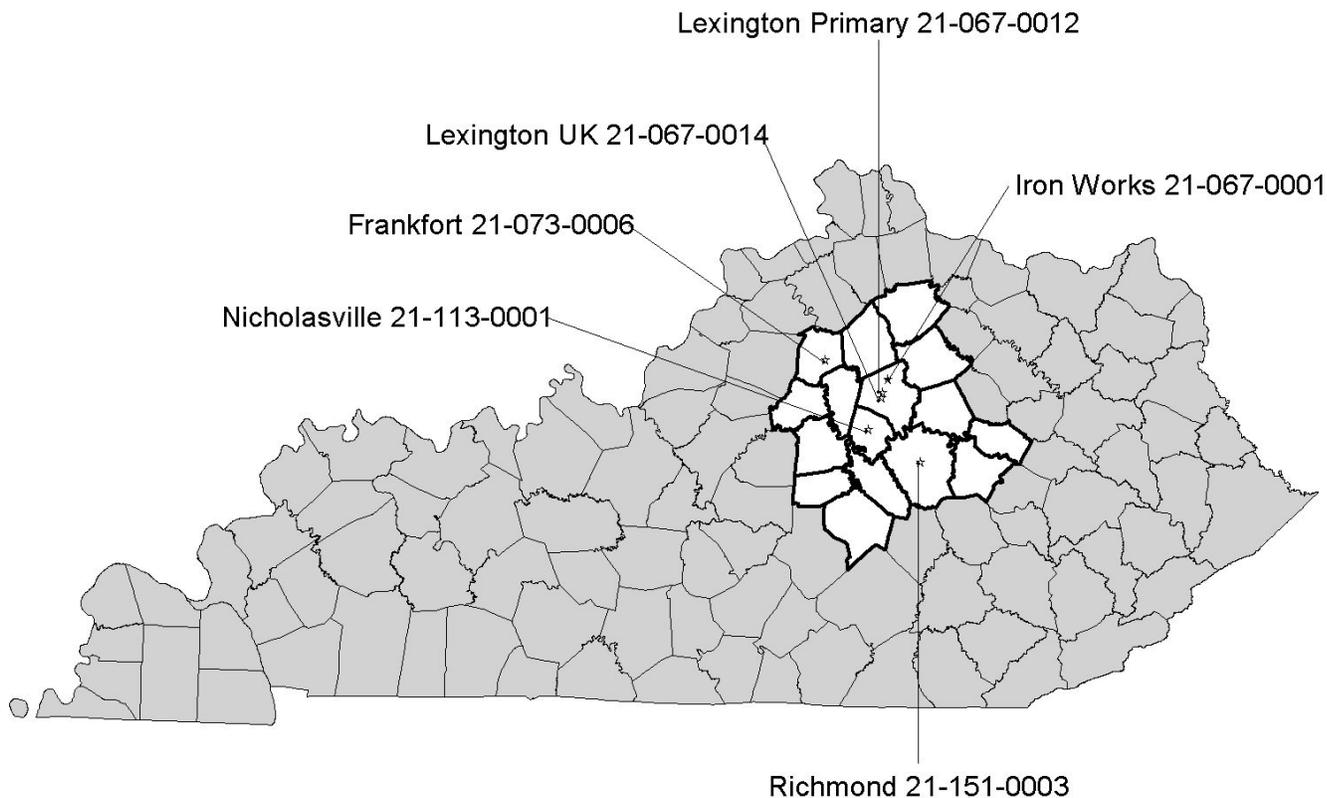
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 4/7/06)

Bluegrass Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb-onyl	Specia-tion	MET
21-067-0001	Iron Works Pike Fayette County						X(N)							
21-067-0012	650 Newtown Pike Lexington (Fayette)	X(t)		X(eI)	X(e)		X (N I e)				X(s)	X(s)	X(s)	
21-067-0014	533 South Limestone Lexington (Fayette)	X	X					X(s)						
21-073-0006	803 Schenkel Lane Frankfort (Franklin)	X												
21-113-0001	KY DOT Garage, US 27 Bypass Nicholasville (Jessamine)				X(s)		X		X					X
21-151-0003	Mayfield Elementary Sch, Bond St Richmond (Madison)	X												
TOTAL		5	1	2	1	0	3	1	1	0	1	1	1	1

- (e) Emergency Episode Monitor
- (I) Air Quality Index Monitor
- (N) National Air Monitoring Station (NAMS) Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Lexington
(City)

Fayette
(County)

Ironworks Pike
(Address)

EPA SITE NO: 21-067-0001

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4222.599 **EASTING** 721.916

DESIGNATION: NAMS - National Air Monitoring Station
SLAMS - State and Local Air Monitoring Station

ESTABLISHED: March 30, 1978

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on Ironworks Pike, approximately 1.25 miles west of Russell Cave Road. The sample inlet is 13 feet above ground level and 25 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents maximum exposure on an urban scale.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To observe pollution trends and provide information for national data analysis.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/8/99)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Lexington (City)	Fayette (County)	650 Newtown Pike (Address)
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EPA SITE NO: 21-067-0012

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4215.775 **EASTING** 719.325

DESIGNATION: NAMS - National Air Monitoring Station (Ozone)
SLAMS - State and Local Air Monitoring Station
SPM-Special Purpose Monitors (Air Toxics)
Episode - Emergency Episode Monitoring Site
AQI - Air Quality Index

ESTABLISHED: November 8, 1979

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the Fayette County Health Department. The sample inlets are 13 feet above ground level and 385 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
A PM_{2.5} speciation sampler operates 24-hours every sixth day. The samples are analyzed using microscopy, thermal optical analysis, ion chromatography, and X-ray fluorescence.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescent method.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.
A Volatile Organics Compound sampler operates for 24-hours every sixth day using EPA Method TO-15.
A Carbonyls sampler operates for 24-hours every sixth day using EPA Method TO-11A.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for sulfur dioxide, ozone, and particulates. Also represents population exposure on an urban scale for nitrogen dioxide and air toxics.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To detect elevated pollutant levels for activation of emergency control procedures. To provide pollutant levels for daily index reporting. To observe pollution trends for national data analysis for ozone.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Lexington
(City)

Fayette
(County)

533 South Limestone
(Address)

EPA SITE NO: 21-067-0014

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4212.768 **EASTING** 718.890

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM-Special Purpose Monitor (Air Toxics)

ESTABLISHED: October 2, 1982

SITE DESCRIPTION:

The site is located on the roof of the Whalen Transportation Research Building on the UK campus. The sample inlet is 32 feet above ground level and 60 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric

A FRM PM₁₀ sampler operates for 24-hours every sixth day. Analysis is gravimetric.

The PM₁₀ samples are analyzed for metals using EPA Method IO-3.4.

A Volatile Organics Compound sampler operates for 24-hours every sixth day using EPA Method TO-15.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Frankfort (City)	Franklin (County)	803 Schenkel Lane (Address)
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EPA SITE NO: 21-073-0006

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4232.135 **EASTING** 689.238

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: January 1, 1999

SITE DESCRIPTION:

The site is located on the roof of the Ragland Building. The sample inlet is 18 feet above ground level and 250 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/8/99)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Nicholasville (City)	Jessamine (County)	DOT Garage, US 27 Bypass (Address)
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EPA SITE NO: 21-113-0001

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4196.525 **EASTING** 711.990

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM-Special Purpose Monitors (Mercury and Sulfur dioxide)

ESTABLISHED: August 1, 1991

SITE DESCRIPTION:

The site is a stationary equipment shelter located on the grounds of the Kentucky DOT Garage. The sample inlet is 13 feet above ground level and 300 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescent method.
A Total Mercury monitor operates continuously using the CVAFS method.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on an urban scale.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To provide ozone data upwind of the Lexington area.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Richmond
(City)

Madison
(County)

Mayfield School, Bond Street
(Address)

EPA SITE NO: 21-151-0003

REGION: (102) Bluegrass

MAP LOCATION: UTM ZONE 16 **NORTHING** 4180.025 **EASTING** 739.195

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: January 1, 1999

SITE DESCRIPTION:

The site is located on the roof at the rear of the Mayfield School. The sample inlet is 15 feet above ground level and 200 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

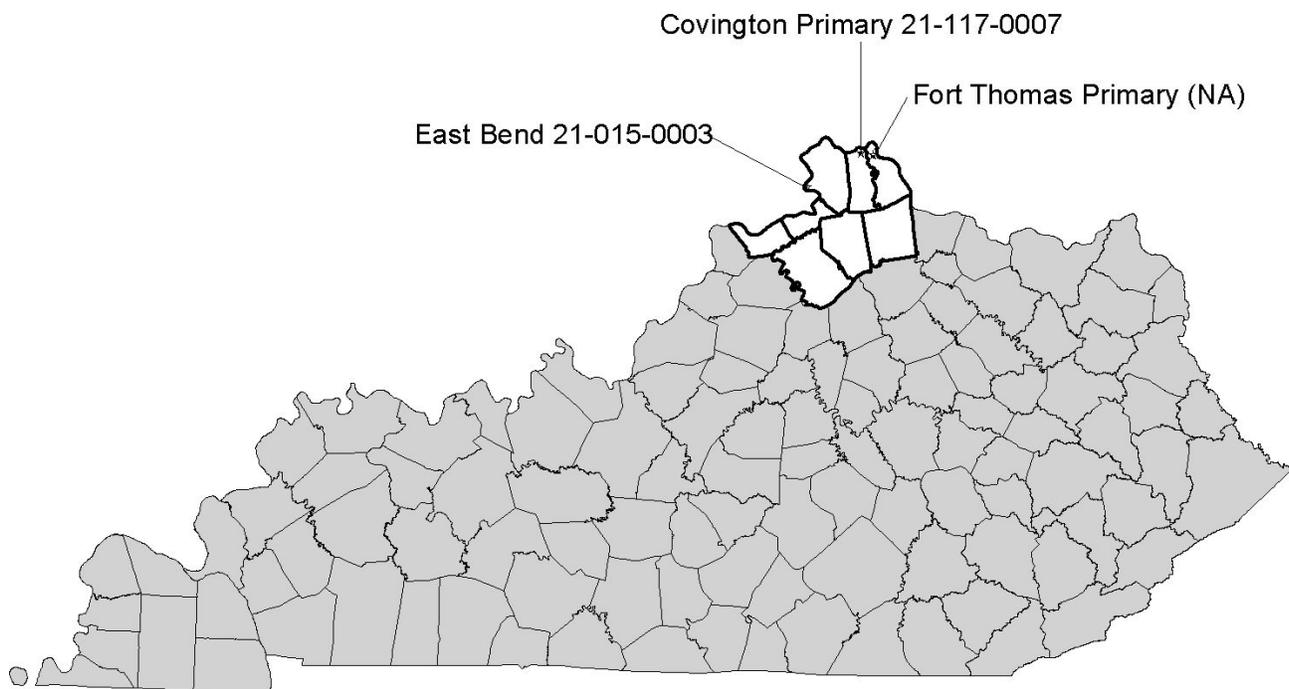
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Cincinnati-Northern Kentucky Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb-onyl	Speciation	MET
21-015-0003	KY 338 & Lower River Road East Bend (Boone)			X(s)			X		X					X
Not Available	Not Available Fort Thomas (Campbell)	X					X(e)							
21-117-0007	1401 Dixie Highway Covington (Kenton)	X(tle)		X(l)	X		X(l)				X	X	X	X
TOTAL		3	0	2	1	0	3	0	1	0	1	1	1	2

(e) Emergency Episode Monitor

(l) Air Quality Index Monitor

(t) Continuous PM Monitor

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

East Bend (City)	Boone (County)	KY 338 & Lower River Road (Address)
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EPA SITE NO: 21-015-0003

REGION: (079) Cincinnati Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4309.690 **EASTING** 686.165

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Sulfur dioxide, Mercury)

ESTABLISHED: July 1, 1977

SITE DESCRIPTION:

The site is a stationary equipment shelter located at the intersection of KY 338 and Lower River Road. The sample inlet is 12 feet above ground level and 50 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescent method.

A Total Mercury monitor operates continuously using the CVAFS method.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents source impact on an urban scale for sulfur dioxide, mercury and background levels on an urban scale for ozone.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Fort Thomas (City)	Campbell (County)	Not Available (Address)
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EPA SITE NO: Not Available

REGION: (079) Cincinnati Interstate

MAP LOCATION: UTM ZONE NA NORTHING NA EASTING NA

DESIGNATION: SLAMS - State and Local Air Monitoring Station
EPISODE - Emergency Episode Monitoring Site
AQI - Air Quality Index site

ESTABLISHED: Pending (2006)

SITE DESCRIPTION:

Pending

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for sulfur dioxide and particulates and on an urban scale for nitrogen dioxide. The site represents maximum exposure on an urban scale for ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect episode levels for the activation of emergency control procedures. To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors will meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented and will apply to this site.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Covington (City)	Kenton (County)	1401 Dixie Hwy, University College (Address)
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EPA SITE NO: 21-117-0007

REGION: (079) Cincinnati Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4327.315 **EASTING** 714.185

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM-Special Purpose Monitor (Air Toxics)
AQI - Air Quality Index Site

ESTABLISHED: August 22, 1975

SITE DESCRIPTION:

The site is a stationary equipment shelter located on the grounds of the school. The sample inlets are 13 feet above ground level and 40 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
A PM_{2.5} speciation sampler operates 24-hours every sixth day. The samples are analyzed using microscopy, thermal optical analysis, ion chromatography, and X-ray fluorescence.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescent method.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.
A Volatile Organics Compound sampler operates for 24-hours every sixth day using EPA Method TO-15.
A Carbonyls sampler operates for 24-hours every sixth day using EPA Method TO-11A.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To provide particulate levels for daily index reporting.

SITE APPROVAL STATUS:

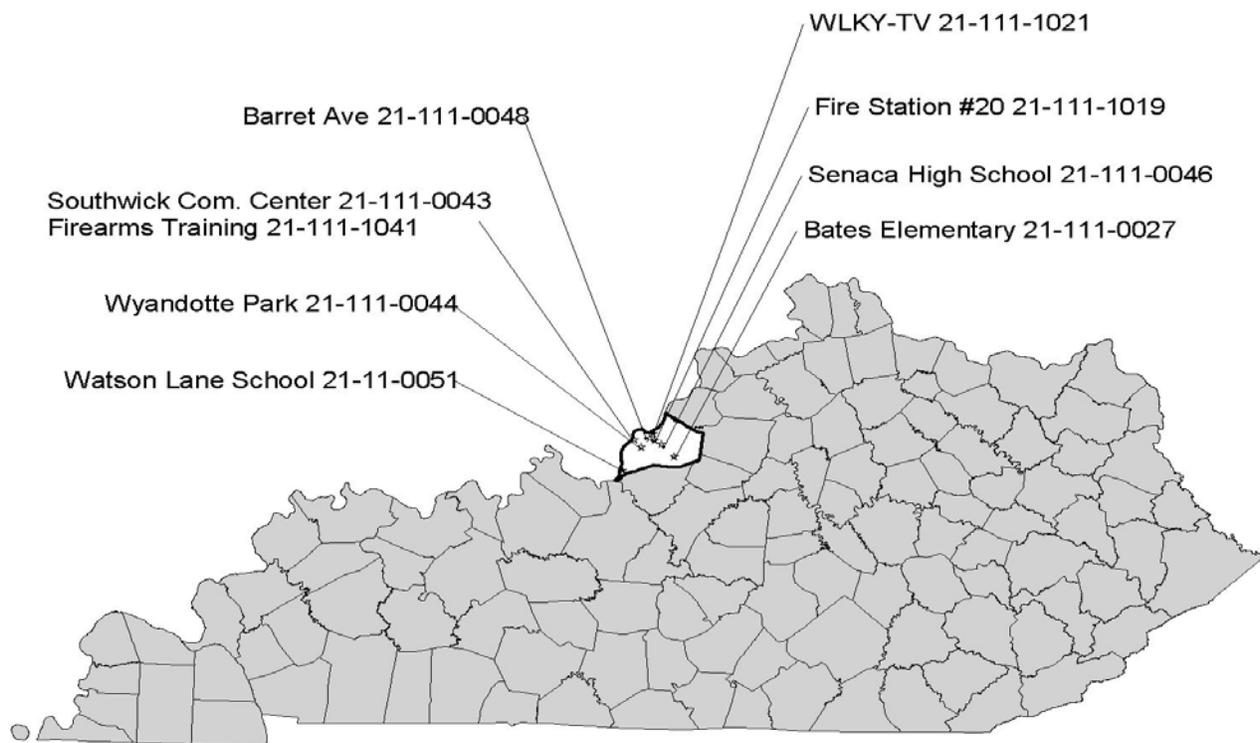
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Louisville Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb-onyl	Specia-tion	MET
21-111-0027	7601 Bardstown Road Louisville (Jefferson)	X(tsI)					X(I)							
21-111-0043	3621 Southern Avenue Louisville (Jefferson)	X(ctI)	X(ctI)										X	X
21-111-0044	1032 Beecher Avenue Louisville (Jefferson)	X(tI)	X(tNI)											
21-111-0046	3510 Goldsmith Lane Louisville (Jefferson)					X(NI)								
21-111-0048	850 Barret Avenue Louisville (Jefferson)	X(t I)												
21-111-0051	7201 Watson Lane Louisville (Jefferson)	X(tsI)		X(I)			X(I)							
21-111-1019	1735 Bardstown Road Louisville (Jefferson)					X(I)								
21-111-1021	1918 Mellwood Ave, WLKY-TV Louisville (Jefferson)				X(e)		X(NI)							
21-111-1041	4201 Algonquin Parkway Louisville (Jefferson)			X(NIe)										
TOTAL		9	3	2	1	2	3	1	0	0	0	0	1	1

- (c) Collocated Monitor
- (e) Emergency Episode Monitor
- (I) Air Quality Index Monitor
- (N) National Air Monitoring Station (NAMS) Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville
(City)

Jefferson
(County)

Bates Elementary, 7601 Bardstown Rd
(Address)

EPA SITE NO: 21-111-0027

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4221.800 **EASTING** 624.600

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (PM_{2.5})
AQI - Air Quality Index site

ESTABLISHED: January 4, 1973

SITE DESCRIPTION:

The site is a mobile trailer located on the grounds of Bates Elementary School. The sample inlet is 13 feet above ground level and 1000 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for PM_{2.5} and on an urban scale for ozone.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 4/28/04)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	Community Center, 3621 Southern Ave (Address)
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EPA SITE NO: 21-111-0043

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4232.027 **EASTING** 602.816

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor
AQI - Air Quality Index site

ESTABLISHED: July 1, 1983

SITE DESCRIPTION:

The site is located on the roof of the Southwick Park Community Center. The sample inlets are 16 feet above ground level and 200 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every day. Analysis is gravimetric.
A collocated FRM PM_{2.5} sampler operates for 24-hours every sixth day. Analysis is gravimetric.
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
A PM_{2.5} speciation sampler operates 24-hours every sixth day. The samples are analyzed using microscopy, thermal optical analysis, ion chromatography, and X-ray fluorescence.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, barometric pressure, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 9/17/02)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	Wyandotte Park, 1032 Beecher Avenue (Address)
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EPA SITE NO: 21-111-0044

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4227.485 **EASTING** 606.791

DESIGNATION: SLAMS - State and Local Air Monitoring Station
NAMS - National Air Monitoring Station (PM₁₀)
AQI - Air Quality Index site

ESTABLISHED: September 1, 1983

SITE DESCRIPTION:

The site is located on the roof of the pool house in Wyandotte Park. The sample inlets are 16 feet above ground level and 150 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM continuous PM₁₀ sampler provides hourly and daily index values using the TEOM method. A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To observe pollution trends and provide information for national data analysis. To provide pollutant levels for daily index reporting

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 12/3/02)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville
(City)

Jefferson
(County)

Seneca High School, Goldsmith Lane
(Address)

EPA SITE NO: 21-111-0046

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4229.550 **EASTING** 617.700

DESIGNATION: SLAMS - State and Local Air Monitoring Station
NAMS - National Air Monitoring Station
AQI - Air Quality Index site

ESTABLISHED: April 1, 1987

SITE DESCRIPTION:

The monitoring site is located in the school building. The sample inlet is 37 feet above ground level and 600 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An ARM Carbon Monoxide analyzer operates continuously using the non-dispersive infrared method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To observe pollution trends and provide information for national data analysis. To determine compliance with and/or progress made toward meeting ambient air quality standards. To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/11/99)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	850 Barret Avenue (Address)
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EPA SITE NO: 21-111-0048

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4233.050 **EASTING** 610.990

DESIGNATION: SLAMS - State and Local Air Monitoring Station
AQI - Air Quality Index

ESTABLISHED: November 1, 1989

SITE DESCRIPTION:

The site is located on the roof of the three-story building. The sample inlets are 33 feet above ground level and 175 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
Rainfall and solar radiation measurements are also made at this site.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 9/17/02)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	Watson Lane School, 7201 Watson Ln (Address)
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EPA SITE NO: 21-111-0051

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4212.940 **EASTING** 596.843

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (PM_{2.5})
AQI - Air Quality Index site

ESTABLISHED: July 16, 1992

SITE DESCRIPTION:

The site is a mobile trailer located on the grounds of Watson Lane Elementary School. The sample inlets are 13 feet above ground level and 125 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every sixth day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 9/17/02)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	Fire Station 20, 1735 Bardstown Rd (Address)
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EPA SITE NO: 21-111-1019

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4231.900 **EASTING** 613.600

DESIGNATION: SLAMS - State and Local Air Monitoring Station
AQI - Air Quality Index site

ESTABLISHED: January 1, 1973

SITE DESCRIPTION:

The monitoring site is located in the fire station. The sample inlet is 10 feet above ground level and 13 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An ARM Carbon Monoxide analyzer operates continuously using the non-dispersive infrared method.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on a micro scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To provide pollutant levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 9/17/02)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	WLKY-TV, 1918 Mellwood Avenue (Address)
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EPA SITE NO: 21-111-1021

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4235.700 **EASTING** 612.800

DESIGNATION: SLAMS - State and Local Air Monitoring Station
NAMS - National Air Monitoring Station (Ozone)
EPISODE - Emergency Episode Monitoring site
AQI - Air Quality Index site

ESTABLISHED: August 31, 1973

SITE DESCRIPTION:

The site is located in the WLKY-TV building. The sample inlets are 15 feet above ground level and 500 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An ARM Nitrogen Dioxide analyzer operates continuously using the chemiluminescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for ozone and on an urban scale for nitrogen dioxide.

MONITORING OBJECTIVES:

To observe pollution trends and provide information for national data analysis. To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect episode levels for the activation of emergency control procedures. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/11/99)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Louisville (City)	Jefferson (County)	4201 Algonquin Parkway (Address)
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EPA SITE NO: 21-111-1041

REGION: (078) Louisville Interstate (Operated by the Louisville-Metro Air Pollution Control District)

MAP LOCATION: UTM ZONE 16 **NORTHING** 4231.475 **EASTING** 602.993

DESIGNATION: SLAMS - State and Local Air Monitoring Station
NAMS - National Air Monitoring Station
EPISODE - Emergency Episode Monitoring Site
AQI - Air Quality Index site

ESTABLISHED: April 13, 1978

SITE DESCRIPTION:

The site is a mobile trailer located on the grounds of the Firearms Training Center. The sample inlet is 15 feet above ground level and 100 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To observe pollution trends and provide information for national data analysis. To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect episode levels for the activation of emergency control procedures. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

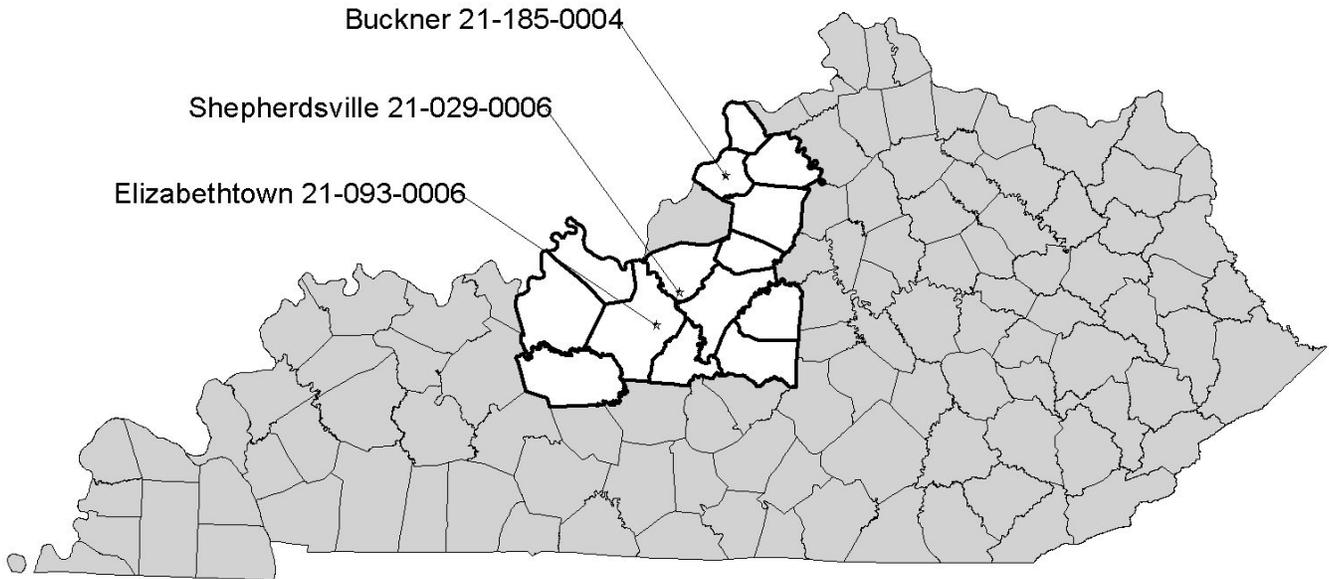
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/11/99)

North Central Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb- onyl	Specia- tion	MET
21-029-0006	2nd & Carpenter Streets Shepherdsville (Bullitt)	X(t)	Xt		X(s)		X							X
21-093-0006	801 N Miles St, Am Legion Park Elizabethtown (Hardin)	X					X(s)							
21-185-0004	DOT Garage, 3995 Morgan Rd Buckner (Oldham)						X							
TOTAL		3	1	0	1	0	3	0	0	0	0	0	0	1

(s) Special Purpose Monitor

(t) Continuous PM Monitor

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Shepherdsville (City)	Bullitt (County)	Second & Carpenter Streets (Address)
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EPA SITE NO: 21-029-0006

REGION: (104) North Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4204.809 **EASTING** 613.025

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Nitrogen dioxide)

ESTABLISHED: January 30, 1992

SITE DESCRIPTION:

The site is a stationary equipment shelter located in a fenced area near the intersection of Second and Carpenter Streets. The sample inlets are 13 feet above ground level. The site is 70 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
An AEM continuous PM₁₀ sampler provides hourly and 24-hour averages using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An ARM Nitrogen Dioxide analyzer operates continuously using the chemiluminescence method.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and on an urban scale for nitrogen dioxide and ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Elizabethtown (City)	Hardin (County)	801 N Miles St, American Legion Park (Address)
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EPA SITE NO: 21-093-0006

REGION: (104) North Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4173.645 **EASTING** 601.215

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Ozone)

ESTABLISHED: February 24, 2000

SITE DESCRIPTION:

The site is a stationary equipment shelter located near the tennis courts on the grounds of the American Legion Park. The sample inlet is 13 feet above ground level and 800 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and on an urban scale for ozone.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Buckner (City)	Oldham (County)	3995 Morgan Rd, DOT Garage (Address)
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EPA SITE NO: 21-185-0004

REGION: (104) North Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4250.990 **EASTING** 635.928

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: May 1, 1981

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the DOT Highway Garage. The sample inlet is 13 feet above ground level and 250 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on an urban scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

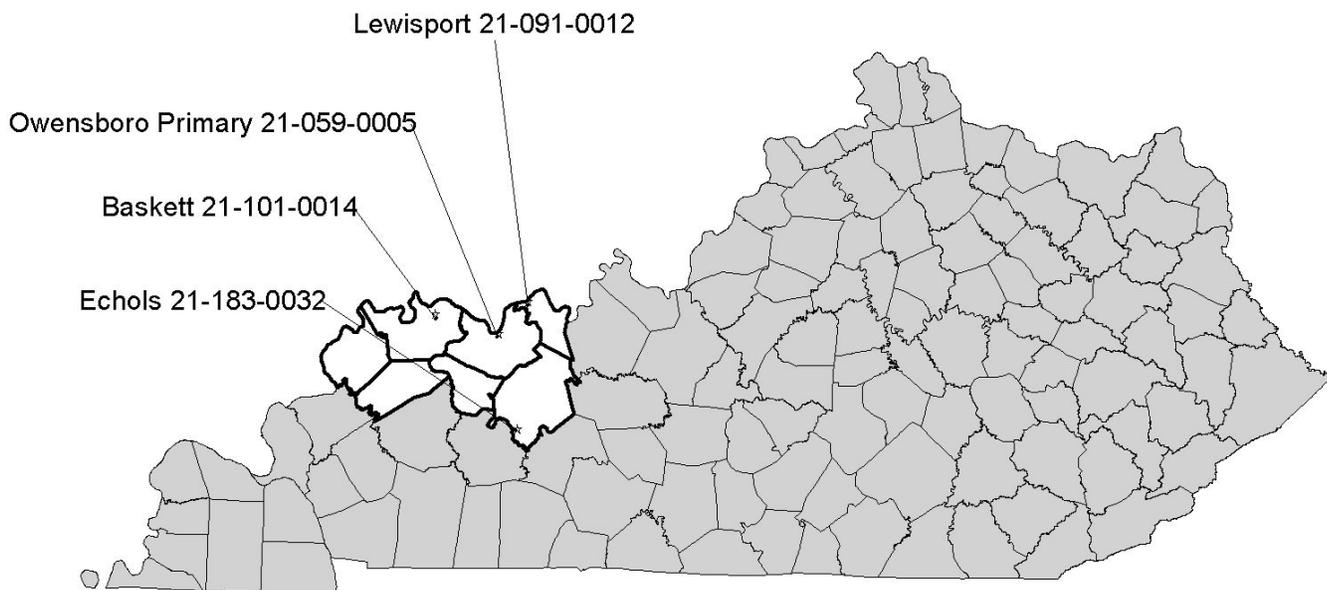
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 2/24/00)

Owensboro-Henderson Region



<u>AIRS ID</u>	<u>ADDRESS</u>	<u>PM2.5</u>	<u>PM10</u>	<u>SO2</u>	<u>NO2</u>	<u>CO</u>	<u>O3</u>	<u>Metals</u>	<u>Hg</u>	<u>Wet Dep.</u>	<u>VOC</u>	<u>Carb -onyl</u>	<u>Specia- tion</u>	<u>MET</u>
21-059-0005	716 Pleasant Valley Road Owensboro (Davieess)	X(tle)		X(el)	X(e)		X(el)							X
21-091-0012	Lewisport Elementary School Lewisport (Hancock)						X							
21-101-0014	Baskett Fire Department Baskett (Henderson)	X(c)	Xt(s)	X			X(s)							
21-183-0032	Keytown Road Echols (Ohio)	X(st)		X(s)	X(s)		X(s)	X(s)	X	X	X(s)	X(s)		X
TOTAL		6	1	3	2	0	4	1	1	1	1	1	0	2

- (c) Collocated Monitor
- (e) Emergency Episode Monitor
- (I) Air Quality Index Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Owensboro Daviess 716 Pleasant Valley Road
(City) (County) (Address)

EPA SITE NO: 21-059-0005

REGION: (077) Evansville-Henderson Interstate

MAP LOCATION: **UTM ZONE** 16 **NORTHING** 4181.775 **EASTING** 493.235

DESIGNATION: SLAMS - State and Local Air Monitoring Station
 EPISODE - Emergency Episode Monitoring Site
 AQI - Air Quality Index site

ESTABLISHED: December 1, 1970

SITE DESCRIPTION:

The site is located in a stationary equipment shelter at the rear of the Wyndall's Shopping Center. The sample inlets are 13 feet above ground level and 200 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.
Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates, sulfur dioxide and ozone and on an urban scale for nitrogen dioxide.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards. To detect emergency pollution levels for activation of emergency control procedures. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Lewisport
(City)

Hancock
(County)

Lewisport Elementary School
(Address)

EPA SITE NO: 21-091-0012

REGION: (077) Evansville-Henderson Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4198.815 **EASTING** 509.055

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: September 5, 1980

SITE DESCRIPTION:

The site is a stationary equipment shelter located at the rear of the school. The sample inlet is eleven feet above ground and 175 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on an urban scale for ozone.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 1/18/05)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Baskett (City)	Henderson (County)	Baskett Fire Department (Address)
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EPA SITE NO: 21-101-0014

REGION: (077) Evansville-Henderson Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4191.410 **EASTING** 459.255

DESIGNATION: SLAMS - State and Local Air Monitor (PM_{2.5})
SPM - Special Purpose Monitor (Ozone, PM₁₀)

ESTABLISHED: February 27, 1992

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located in front of the Baskett Fire Department. The sample inlets are 13 feet above ground level and 25 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A collocated FRM PM_{2.5} samplers operates for 24-hours every sixth day. Analysis is gravimetric.
An AEM continuous PM₁₀ sampler provides hourly and 24-hour averages using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on an urban scale for ozone and population exposure on a neighborhood scale for sulfur dioxide and particulates.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/03)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Echols (City)	Ohio (County)	Keytown Road (Address)
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EPA SITE NO: 21-183-0032

REGION: (077) Evansville-Henderson

MAP LOCATION: **UTM ZONE** 16 **NORTHING** 4130.140 **EASTING** 503.890

DESIGNATION: SPM - Special Purpose Monitoring Station

ESTABLISHED: February 1, 2005

SITE DESCRIPTION:

The site is in a stationary equipment shelter located in a pasture on Keytown Road near the intersection with Pond Church Road. The sample inlets are 12 feet above ground level and 100 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric

A continuous PM_{2.5} sampler provides hourly values using the TEOM method.

A FRM PM₁₀ sampler operates for 24-hours every sixth day. Analysis is gravimetric.

Metals analysis is conducted on the PM₁₀ samples using EPA Method IO-3.4.

An AEM Ozone monitor operates continuously using the UV open-path method.

An AEM Sulfur Dioxide monitor operates continuously using the UV open-path method.

A Total Mercury monitor operates continuously using the CVAFS method.

An AEM Nitrogen Dioxide monitor operates continuously using the UV open-path method.

Volatile Organic Compounds are monitored continuously using the UV open-path method.

Carbonyls are monitored continuously using the UV open-path method.

Ammonia is monitored continuously using the UV open-path method.

A wet deposition sampler is used to collect rainfall weekly for analysis of Mercury by the CVAFS method.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, rainfall, and temperature.

AREA REPRESENTATIVENESS:

The site represents maximum exposure on an urban scale.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

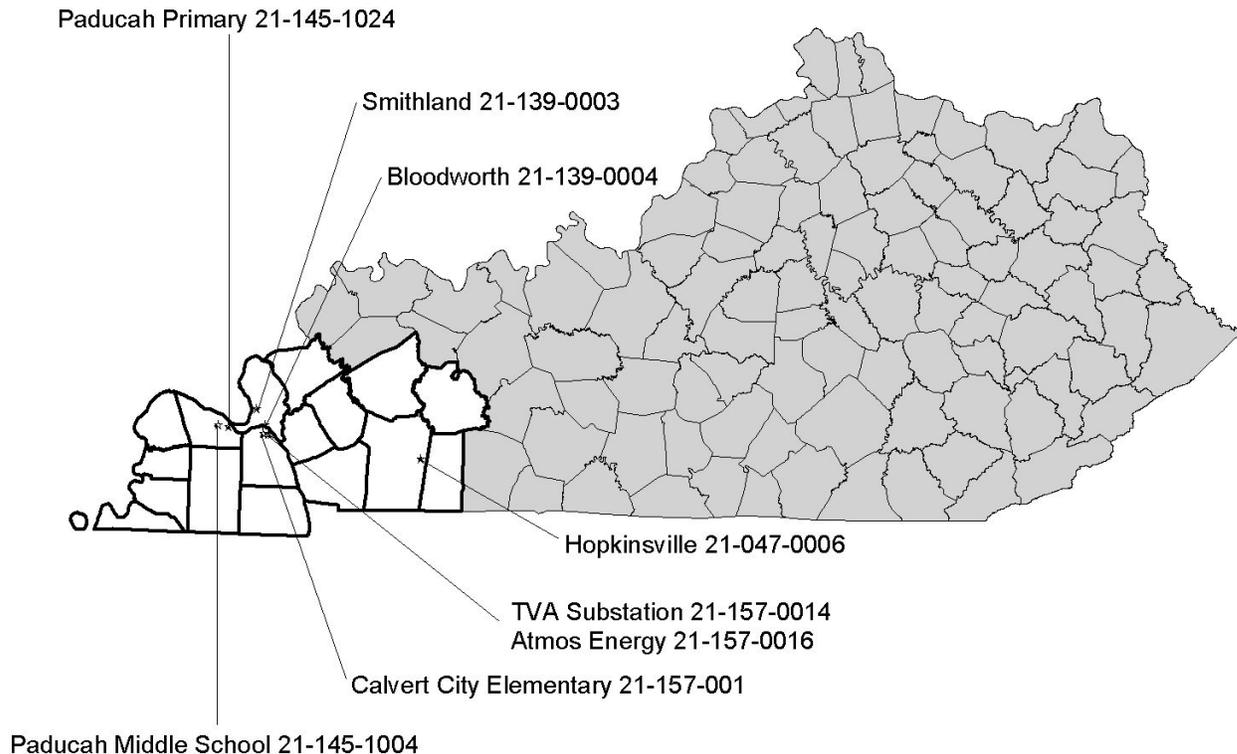
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Paducah-Cairo Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep.	VOC	Carb- onyl	Specia -tion	MET
21-047-0006	10800 Pilot Rock Road Hopkinsville (Christian)	X												
21-139-0003	DOT Garage, 811 Hwy 60 East Smithland (Livingston)							X						
21-139-0004	763 Bloodworth Road Livingston County			X					X		X(cs)			X
21-145-1004	Middle School, 342 Lone Oak Rd Paducah (McCracken)	X	X											
21-145-1024	J-P RECC, 2901 Powell Street Paducah (McCracken)	Xt(lc)		X(e)	X(e)		X(e)							
21-157-0014	TVA Substation Calvert City (Marshall)										X(s)			
21-157-0016	Atmos Energy Calvert City (Marshall)										X(s)			
21-157-0018	Calvert City Elementary School Calvert City (Marshall)		X					X			X(s)			X
TOTAL		3	2	2	1	0	2	1	1	0	5	0	0	2

- (c) Collocated Monitor
- (e) Emergency Episode Monitor
- (I) Air Quality Index Monitor
- (t) Continuous PM Monitor

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Hopkinsville (City)	Christian (County)	10800 Pilot Rock Road (Address)
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EPA SITE NO: 21-047-0006

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4084.919 **EASTING** 471.172

DESIGNATION: SLAMS - State and Local Air Monitoring Station
(TVA Compliance Monitoring Station for Ozone)

ESTABLISHED: January 1, 1999

SITE DESCRIPTION:

The monitoring site is on a platform in a field adjacent to a residence. The sample inlet is 10 feet above ground level and 300 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric. The Tennessee Valley Authority (TVA) also operates the following at this site. An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry. Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a regional scale.

MONITORING OBJECTIVES:

To determine levels of interstate transport of fine particulate matter. To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/12/99)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Smithland
(City)

Livingston
(County)

KY DOT Garage, 811 HWY 60 East
(Address)

EPA SITE NO: 21-139-0003

REGION: 072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4112.835 **EASTING** 376.310

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: April 1, 1981

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the DOT Highway Garage. The sample inlet is 13 feet above ground level and 1200 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on an urban scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 12/10/01)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Livingston County (City)	Livingston (County)	763 Bloodworth Road (Address)
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EPA SITE NO: 21-139-0004

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4103.359 **EASTING** 381.395

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM-Special Purpose Monitors (Air Toxics, Mercury)

ESTABLISHED: September 15, 1986

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located in a field at the end of Bloodworth Road. The sample inlets are 13 feet above ground level and 1200 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Sulfur Dioxide analyzer operates continuously using the UV fluorescence method.

A Total Mercury monitor operates continuously using the CVAFS method.

A Volatile Organics Compounds sampler operates for 24-hours every sixth day using EPA Method TO-15.

A collocated Volatile Organics Compounds sampler operates for 24-hours every sixth day using EPA Method TO-15.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents maximum concentrations on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Paducah
(City)

McCracken
(County)

Paducah Middle Sch, 342 Lone Oak
(Address)

EPA SITE NO: 21-145-1004

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4103.196 **EASTING** 354.393

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: July 1, 1969

SITE DESCRIPTION:

The monitoring site is on the roof of the school. The sample inlets are 20 feet above ground level and 110 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric.

A FRM PM₁₀ sampler operates for 24-hours every sixth day. Analysis is gravimetric.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Paducah (City)	McCracken (County)	Jackson Purchase RECC, 2901 Powell Street (Address)
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EPA SITE NO: 21-145-1024

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4102.275 **EASTING** 360.190

DESIGNATION: SLAMS - State and Local Air Monitoring Station
EPISODE - Emergency Episode Monitoring Site
AQI - Air Quality Index site

ESTABLISHED: August 15, 1980

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located in an open area at the back of the Jackson Purchase RECC. The sample inlets are 13 feet above ground level and 31 feet from the nearest street.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A continuous PM_{2.5} sampler provides hourly and daily index reporting using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates, sulfur dioxide and ozone and on an urban scale for nitrogen dioxide.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.
To detect episode pollution levels for the activation of emergency control procedures. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Calvert City-TVA (City)	Marshall (County)	Ballpark Road (Address)
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EPA SITE NO: 21-157-0014

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4098021.38 **EASTING** 393693.68

DESIGNATION: SPM-Special Purpose Monitoring Station

ESTABLISHED: January 01, 2005

SITE DESCRIPTION:

The monitoring site is an air toxic monitor located off of Ballpark Road with the sample probe height at two meters from ground level.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A Volatile Organics Compounds sampler operates for 24-hours every sixth day using EPA Method TO-15.

AREA REPRESENTATIVENESS:

The site represents exposure on a middle scale.

MONITORING OBJECTIVES:

To determine if toxic air pollutants are present and quantify them.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Calvert City-Atmos (City)	Marshall (County)	KY95 (Address)
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EPA SITE NO: 21-157-0016

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4097917.8 **EASTING** 392233.26

DESIGNATION: SPM-Special Purpose Monitoring Station

ESTABLISHED: January 01, 2005

SITE DESCRIPTION:

The monitoring site is an air toxic monitor located off of KY95 with the sample probe height at two meters from ground level.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A Volatile Organics Compounds sampler operates for 24-hours every sixth day using EPA Method TO-15.

AREA REPRESENTATIVENESS:

The site represents exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine if toxic air pollutants are present and quantify them.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Calvert City (City)	Marshall (County)	Calvert City Elementary Sch, 623 5 th Ave (Address)
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EPA SITE NO: 21-157-0018

REGION: (072) Paducah-Cairo Interstate

MAP LOCATION: UTM ZONE 16 **NORTHING** 4098.457 **EASTING** 380.410

DESIGNATION: SPM - Special Purpose Monitoring Station

ESTABLISHED: May 1, 2005

SITE DESCRIPTION:

The site is located in a stationary equipment shelter located behind the Calvert City Elementary School. The sample inlets are thirteen feet above ground level and 80 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM₁₀ sampler operates for 24-hours every sixth day. Analysis is gravimetric.

Metals analysis is conducted on the PM₁₀ samples using EPA Method IO-3.

A Volatile Organics Compounds sampler operates for 24-hours every sixth day using EPA Method TO-15.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine if toxic air pollutants are present and quantify them. To provide meteorological data for toxics analysis.

SITE APPROVAL STATUS:

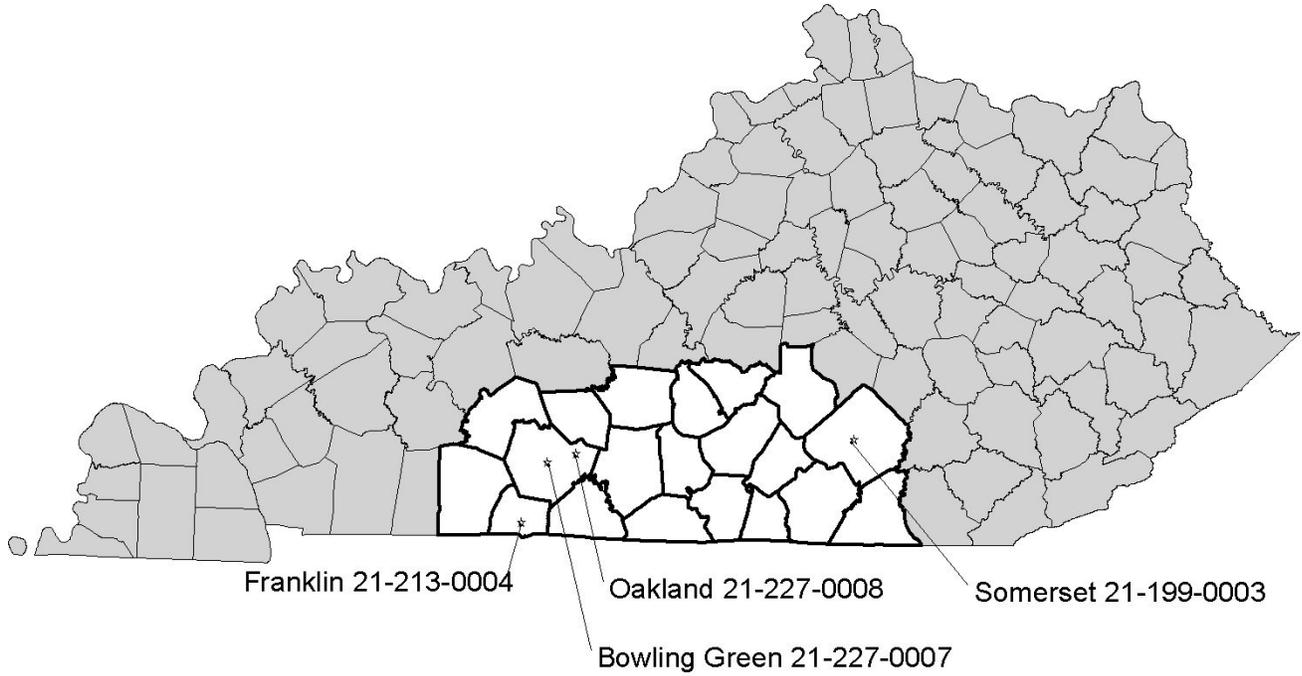
Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 2/21/05)

South Central Region



AIRS ID	ADDRESS	PM2.5	PM10	SO2	NO2	CO	O3	Metals	Hg	Wet Dep. VOC	Carb-onyl	Speciation	MET
21-199-0003	Somerset Gas Co., Clifty Street Somerset (Pulaski)			X			X(s)		X				X
21-213-0004	KY DOT Garage, KY 1008 Franklin (Simpson)						X(s)						X
21-227-0007	Kereiakes Park Bowling Green (Warren)		X(c)										
21-227-0008	Oakland School Oakland (Warren)		X(t)		X(s)		X(s)						
TOTAL		3	0	0	1	0	3	0	0	0	0	0	1

- (c) Collocated Monitor
- (I) Air Quality Index Monitor
- (s) Special Purpose Monitor
- (t) Continuous PM Monitor

(Rev.3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Somerset
(City)

Pulaski
(County)

Somerset Gas Company, Clifty St
(Address)

EPA SITE NO: 21-199-0003

REGION: (105) South Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4108.192 **EASTING** 711.990

DESIGNATION: SPM - Special Purpose Monitoring Station

ESTABLISHED: February 14, 1992

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the Somerset Gas Company Warehouse on Clifty Street. The sample inlets are 13 feet above ground level and 35 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.

An AEM Sulfur Dioxide monitor operates continuously using the UV fluorescence method.

A Total Mercury monitor operates continuously using the CVAFS Method.

Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and on an urban scale for ozone.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Franklin
(City)

Simpson
(County)

DOT Garage, KY 1008
(Address)

EPA SITE NO: 21-213-0004

REGION: (105) South Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4062.295 **EASTING** 538.595

DESIGNATION: SPM - Special Purpose Monitoring Station

ESTABLISHED: June 19, 1991

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the DOT Garage on KY1008. The sample inlet is 13 feet above ground level and 200 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry. Meteorological data is collected using AQM grade instruments for wind speed, wind direction, humidity, and temperature.

AREA REPRESENTATIVENESS:

The site represents population exposure on an urban scale.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To measure ozone levels upwind of Bowling Green and provide data on interstate ozone transport.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 12/8/00)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Bowling Green (City)	Warren (County)	Kereiakes Park, Fairview Avenue (Address)
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EPA SITE NO: 21-227-0007

REGION: (105) South Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4094.095 **EASTING** 551.762

DESIGNATION: SLAMS - State and Local Air Monitoring Station

ESTABLISHED: January 1, 1999

SITE DESCRIPTION:

The site is located on a platform behind the tennis courts at Kereiakes Park. The sample inlets are 10 feet above ground level and 400 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A FRM PM_{2.5} sampler operates for 24-hours every third day. Analysis is gravimetric
A duplicate FRM PM_{2.5} sampler operates for 24 hours every sixth day. Analysis is gravimetric.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale.

MONITORING OBJECTIVES:

To determine compliance with and/or progress made toward meeting ambient air quality standards.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/27/06)

Kentucky Department for Environmental Protection

AIR QUALITY SURVEILLANCE NETWORK

LOCATION:

Oakland (City)	Warren (County)	Oakland Elementary School (Address)
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EPA SITE NO: 21-227-0008

REGION: (105) South Central

MAP LOCATION: UTM ZONE 16 **NORTHING** 4199.050 **EASTING** 566.675

DESIGNATION: SLAMS - State and Local Air Monitoring Station
SPM - Special Purpose Monitor (Ozone, Nitrogen dioxide)
AQI - Air Quality Index Site

ESTABLISHED: January 1, 2000

SITE DESCRIPTION:

The monitoring site is a stationary equipment shelter located on the grounds of the Oakland Elementary School. The sample inlets are 13 feet above ground level and 200 feet from the nearest road.

MONITORS, (Type, Analysis Method, Frequency of Sampling):

A continuous PM_{2.5} sampler provides hourly and daily index values using the TEOM method.
An AEM Ozone monitor operates continuously from April 1-October 31 using UV photometry.
An ARM Nitrogen Dioxide monitor operates continuously using the chemiluminescence method.

AREA REPRESENTATIVENESS:

The site represents population exposure on a neighborhood scale for particulates and on an urban scale for nitrogen dioxide. The site represents maximum concentrations on an urban scale for ozone.

MONITORING OBJECTIVES:

To judge compliance with and/or progress made toward meeting ambient air quality standards. To provide pollution levels for daily index reporting.

SITE APPROVAL STATUS:

Site and monitors meet all design criteria for monitoring network.

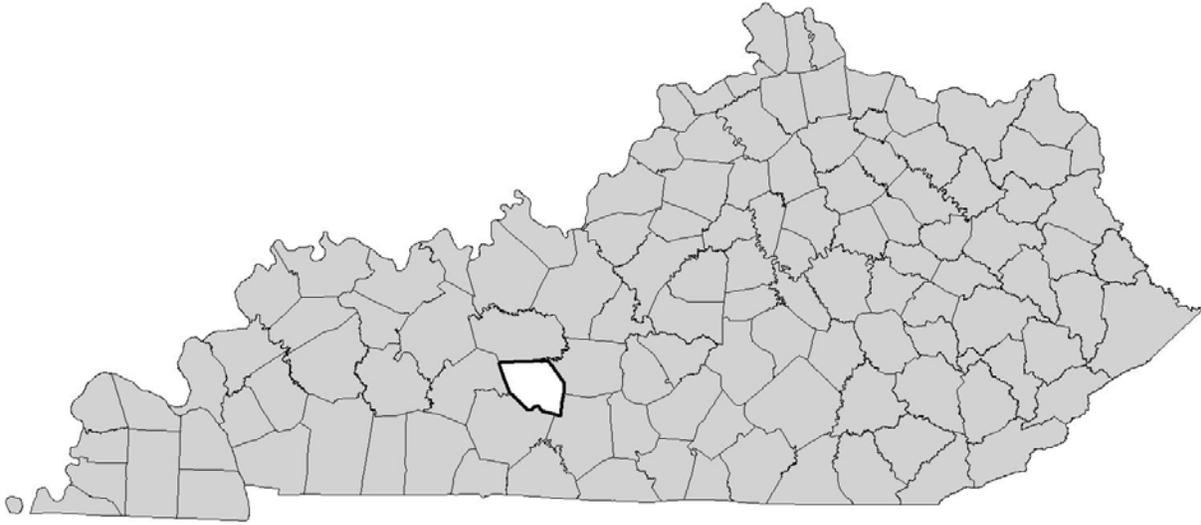
QUALITY ASSURANCE STATUS:

All Quality Assurance procedures have been implemented.

(Rev. 3/26/07)

APPENDIX A

National Park Service



AIR QUALITY SURVEILLANCE NETWORK NATIONAL PARK SERVICE

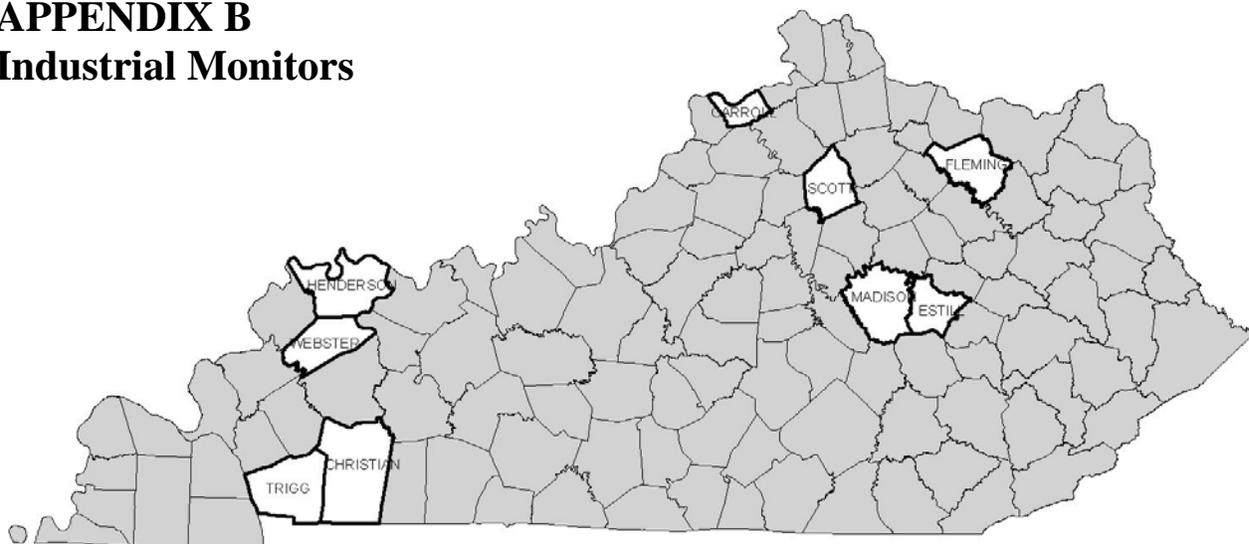
AIRS ID	ADDRESS	PM _{2.5}	PM ₁₀	SO ₂	NO ₂	CO	O ₃	MET
21-061-0501	Alfred Cook Road Mammoth Cave (Edmonson)	X ¹		X	X	X	X	X
TOTAL		1	0	1	1	1	1	1

¹ A continuous sampler operates here.

IMPROVE Site-Interagency Monitoring of PROtected Visual Environments
 National Atmospheric Program
 National Mercury Wet Deposition Network
 VISTAS-Visibility Improvement States and Tribal Association of the Southeast research station

(Rev. 3/27/06)

APPENDIX B Industrial Monitors



AIRS ID	ADDRESS	PM _{2.5}	PM ₁₀	SO ₂	NO ₂	CO	O ₃
21-041-0004 ⁵	US 42 Ghent (Carroll)		X (collocated)		X		
21-041-0005 ³	US 42 Ghent (Carroll)		X				
21-047-0006 ¹	10800 Pilot Rock Road Hopkinsville (Christian)	X ^{DAQ}					X
21-065-9001 ⁶	100 EK Power Lane Irvine (Estill)			X			
21-069-9001 ⁶	455 Industrial Drive Flemingsburg (Fleming)						X
21-101-1010 ²	US 41 & KY 2096 Sebree (Henderson)			X			
21-101-1011 ²	KY 2097 Sebree (Henderson)			X			
21-151-9001 ⁶	246 Ford Road Richmond (Madison)			X			
21-209-0002 ³	4673 Muddy Ford Road Scott County						X
21-221-0013 ¹	Mulberry Flat Road LBL (Trigg)						X
21-233-0002 ²	Bell Gibson Road Webster County			X			
54-099-0003 ⁴	Spring Brook Drive Kenova (Wayne, WV)			X	X		X
54-099-0004 ⁴	Route 52 Neal (Wayne, WV)			X			
54-099-0005 ⁴	Big Sandy Road Neal (Wayne, WV)			X			
TOTAL		0	2	8	2	0	5

¹ – TVA

² – Western Kentucky Electric

³ – Toyota

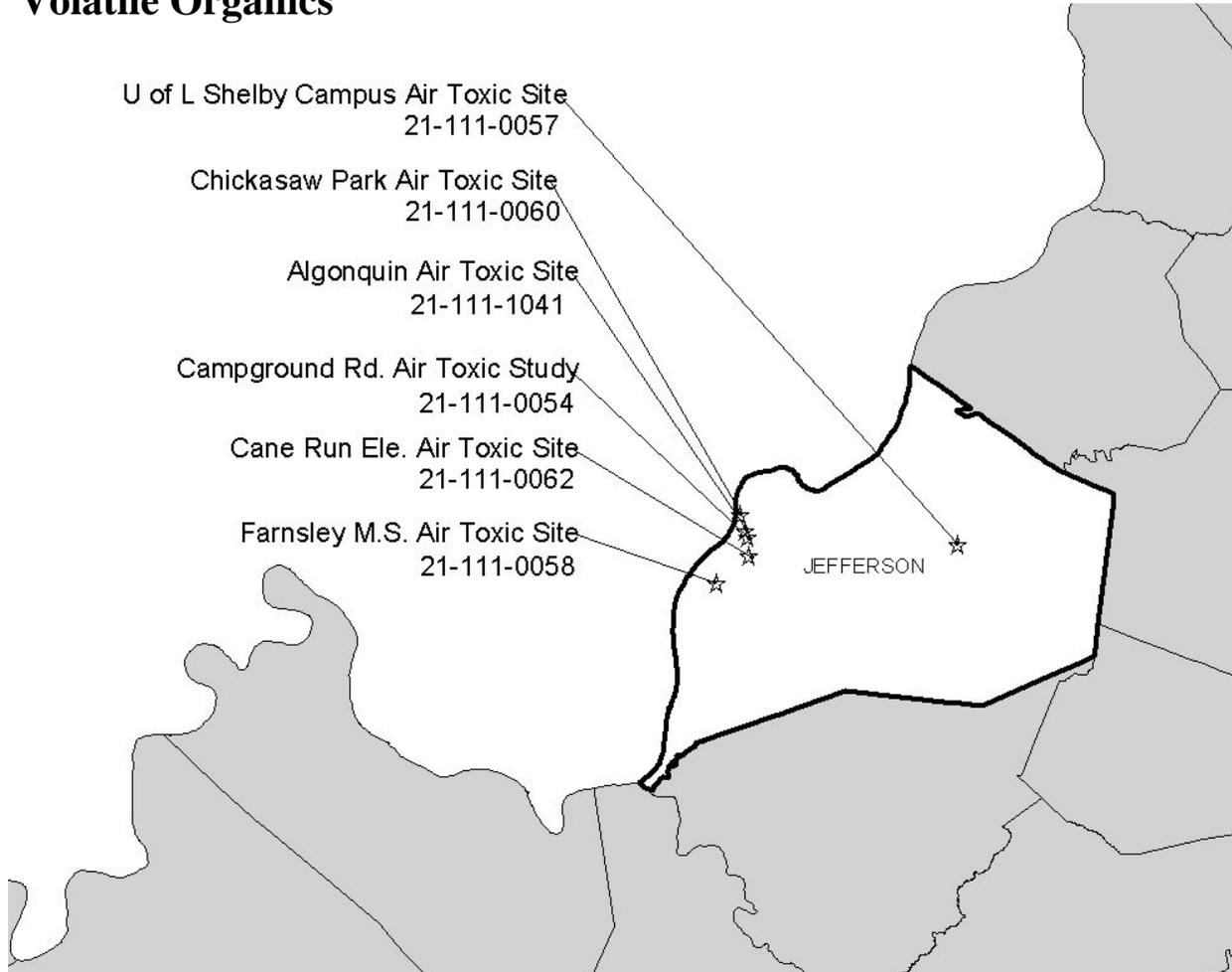
⁴ – Marathon-Ashland Petroleum

⁵ – North American Stainless

⁶ – East Kentucky Power

APPENDIX C

Jefferson County Air Toxics Monitoring Stations Volatile Organics



AIRS ID	Established	Method	Location	Purpose
21-111-1041	1999	TO-15	4201 Algonquin Parkway	Maximum Impact
21-111-0054	1999	TO-15	4211 Campground Road	Maximum Impact
21-111-0057	1999	TO-15	U of L Shelby Campus	Urban Control Site
21-111-0058	1999	TO-15	Farnsley Middle School 3400 Lees Lane	Neighborhood Exposure
21-111-0060	1999	TO-15	Chickasaw Park	Neighborhood Exposure
21-111-0062	1999	TO-15	Cane Run Elementary	Neighborhood Exposure

(Rev. 4/24/06)