

**ANNUAL NETWORK PLAN
2020**

**DIVISION OF NATURAL RESOURCES
AND ENVIRONMENTAL MANAGEMENT**

AMBIENT AIR QUALITY MONITORING PROGRAM

CITY OF HUNTSVILLE, ALABAMA



HUNTSVILLE
The Star of Alabama

**NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT
Post Office 308
Huntsville, Alabama 35804-0308**

May 2020

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Definitions and Acronyms

AAQM	Ambient Air Quality Monitoring
AAQM P	Ambient Air Quality Monitoring Plan
ARM	Approved Regional Method
AQI	Air Quality Index
AQS	Air Quality System
avg	average
CBSA	Core Based Statistical Area
CFR	<i>Code of Federal Regulations</i>
CO	Carbon Monoxide
CSA	Combined Statistical Area
EPA	Environmental Protection Agency
FEM	Federal Equivalent Method
FRM	Federal Reference Method
DNREM	Division of Natural Resources and Environmental Management
hr	hour
hi-vol	high-volume PM10 sampler
low-vol	low-volume particulate sampler
m ³	cubic meter
min	minute
ml	milliliter
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCore	National Core multipollutant monitoring stations
O ₃	ozone
PAMS	Photochemical Assessment Monitoring Stations
Pb	lead
PM	particulate matter
PM _{2.5}	particulate matter ≤ 2.5 micrometers diameter
PM ₁₀	particulate matter ≤ 10 micrometer diameter
PM _{10-2.5}	particulate matter ≤ 10 microns but > 2.5 microns
PSD	Prevention of Significant Deterioration
PWEI	Population Weighted Emissions Index
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
SLAMS	State and Local Air Monitoring Station
SO ₂	Sulfur Dioxide
SPM	Special Purpose Monitor
TEOM	Tapered Element Oscillating Microbalance (Rupprecht and Patashnick Co.)
tpy	tons per year
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
° C	degree Celsius
µg/m ³	micrograms (of pollutant) per cubic meter (of air sampled)
≥	greater than or equal to
>	greater than
≤	less than or equal to
<	less than

Introduction

In October 2006, the United States Environmental Protection Agency (EPA) issued final Federal Regulations codified at 40 CFR Part 58 concerning state agency ambient air monitoring networks.

These regulations require states to submit an annual monitoring network review to EPA. This document provides the framework for establishment and maintenance of Huntsville's air quality surveillance system, lists changes that occurred during 2019, and changes proposed to take place to the current ambient air monitoring network during 2020/2021.

Public Review and Comment

The annual monitoring network review must be made available for public inspection for thirty (30) days prior to submission to EPA. For 2020, this document was placed on the City of Huntsville's website on May 29, 2020 to begin a 30-day public review period. This document can be accessed at the following link:

<https://www.huntsvilleal.gov/government/media-center/legal-notices/>

Or by contacting:

Scott Cardno, Director
Division of Natural Resources and Environmental Management
P.O. Box 308
Huntsville, AL
35804

(Street address: 320 Fountain Circle, Huntsville, AL
35801)

Or by e-mail at scott.cardno@huntsvilleal.gov

Huntsville Alabama Network Overview

The Huntsville Division of Natural Resources and Environment Management operates an air monitoring network consisting of State and Local Air Monitoring Stations (SLAMS) and Special Purpose Monitors (SPMs). The current network configuration consists of five monitoring stations that measure concentrations of criteria air pollutants. The type and number of monitoring stations required in Huntsville are determined by the network design criteria set forth in 40 CFR 58.

Regulations codified at 40 CFR Part 58, Appendices A (Quality Assurance Requirements for Monitors used in Evaluations of National Ambient Air Quality Standards), C (Ambient Air Quality Monitoring Methodology), D (Network Design Criteria for Ambient Air Quality Monitoring) and E (Probe and Monitoring Path Siting Criteria for Ambient Air Quality Monitoring) were reviewed to determine if modifications to the existing air monitoring network are required.

Population and Core Based Statistical Area/Metropolitan Statistical Area

Minimum monitoring requirements vary for each pollutant and can be based on a combination of factors such as population, the level of monitored pollutants, and Core Based Statistical Area (CBSA) / Metropolitan Statistical Area (MSA) boundaries as defined in the latest US Census Bureau estimates.

The 2019 population estimate for the CBSA/MSA of Huntsville is 471,824. The CBSA/MSA title is Huntsville, Alabama, which includes Madison and Limestone Counties.

National Core Multipollutant Monitoring Stations

Each State is required to operate one National Core Multipollutant Monitoring Stations (NCore) site. Huntsville was not selected for the NCore site.

Photochemical Assessment Monitoring Stations

Photochemical Assessment Monitoring Stations (PAMS) monitoring is required in areas classified as serious, severe, or extreme for the 8-hour ozone (O₃) standard. Huntsville is presently classified as an O₃ attainment area. Consequently, PAMS monitoring is not required.

State and Local Air Monitoring Stations

The minimum O₃ monitoring requirements are based on MSA populations and three-year design value concentrations. The Huntsville MSA population is 471,824 based on U.S. Census Bureau 2019 estimates. Huntsville's three-year design value concentration for 2017-2019 is .063 ppm. MSAs with populations of 50,000 to less than 350,000 having a

design value $\geq 85\%$ of the O₃ NAAQS are required to operate one O₃ site. MSAs with populations of 350,000 to less than 4,000,000 are required to operate two O₃ sites. Huntsville operates two O₃ monitoring sites, as required.

There is a two-tier minimum nitrogen dioxide (NO₂) SLAMS monitoring requirement. Near-road microscale monitoring is required in each CBSA with a population of 1,000,000 or more. Area-wide high concentration monitoring is required in each CBSA with a population of 1,000,000 or more. The estimated population for Huntsville-Decatur, AL CBSA is 471,824. Huntsville is not required to operate a SLAMS NO₂ monitor.

The minimum SLAMS monitoring requirements for carbon monoxide (CO) require one monitor be collocated with a near-road NO₂ monitor in each CBSA with a population of 1,000,000 or more. Huntsville is not required to operate a SLAMS CO monitor.

The minimum sulfur dioxide (SO₂) monitoring requirements are based on a Population Weighted Emissions Index (PWEI), which is calculated by multiplying the population of the CBSA and the total SO₂ emissions (using the most recent published version of the National Emissions Inventory (NEI)) within the CBSA area. The resulting product is then divided by 1,000,000, representing million persons-tons per year. Areas having a PWEI greater than 1,000,000 are required to operate three monitors; areas having a PWEI equal to or greater than 100,000 but less than 1,000,000 are required to operate two monitors; areas having a PWEI greater than 5,000 but less than 100,000 are required to operate 1 monitor. The Huntsville PWEI is 82 (based on 2019 population estimates and 2017 NEI, total SO₂ emissions data for the Huntsville-Decatur, AL CBSA). Huntsville is not required to operate a SLAMS SO₂ monitor.

A SLAMS Lead (Pb) monitor is required in areas where Pb levels have been shown or are expected to be of concern due to the proximity of Pb point source emissions. Generally, industrial sources emitting 0.5 ton or more of Pb per year and airports emitting 1.0 ton or more per year would be candidates for Pb ambient air monitoring. There are no significant point sources of Pb emissions in Huntsville. Based on past monitoring and emissions inventory data, a SLAMS Pb site is not required.

Huntsville's PM₁₀ concentrations are less than 80 percent of the PM₁₀ National Ambient Air Quality Standards (NAAQS). Based on Huntsville's MSA population being between 250,000-500,000 and low concentrations, Huntsville is required to operate one SLAMS site. Huntsville operates three PM₁₀ sites located in south, central, and north Huntsville. These monitors can be operated at very low cost and provide good spatial coverage within the city. Experience has shown that members of the public want ambient air monitoring to be performed in their part of the city, and the PM₁₀ monitoring sites provide a monitoring presence at relatively low cost. Furthermore, the PM₁₀ data provide an indirect indication of spatial variability of PM_{2.5} at a tiny fraction of the cost of operating multiple PM_{2.5} sites.

The minimum PM_{2.5} monitoring requirements are based on MSA populations and three-year design value concentrations. Huntsville's three-year design value concentration for

2017-2019 is 16.0 µg/m³ for the 24-hour standard and 7.4 µg/m³ for the annual standard. MSA's with populations of 50,000 to less than 500,000 having a design value ≥ 85% of the PM_{2.5} NAAQS are required to operate one PM_{2.5} site on a one in three-day sampling frequency. Huntsville operates one PM_{2.5} site on a one in three-day schedule although the current design values are <85% of the NAAQS. Note: Operating frequency increases to daily sampling when the 24-hour design value is within ± 5 percent of the 24-hour PM_{2.5} NAAQS (34, 35, and 36 µg/m³).

SLAMS sites were also evaluated to determine consistency of spatial scales with stated monitoring objectives. Reference the attached monitoring network description. In addition to the information listed below, the description also indicates site locations, monitoring methodologies, and operational schedules.

Site #	Site Name	Pollutant	Monitoring Objective	Current Spatial Scale based on ADT* for nearest streets	Scale Meets Objective
0002	Pulaski	PM ₁₀	Population	Neighborhood	Yes
0004	South Parkway	PM ₁₀	High Conc.	Middle	Yes
0014	Airport Road	PM ₁₀	Population	Urban	Yes
0014	Airport Road	PM _{2.5}	Population	Urban	Yes
0014	Airport Road	O ₃	Population	Neighborhood	Yes
0022	Capshaw	O ₃	High Conc.	Urban	Yes

Notes:

Site 0002	Monitor 30.5 m from Pulaski Pike	ADT 14,000
Site 0004	Monitor 30.5 m from Mem. Pkwy.	ADT 33,000
Site 0014		
Old Monitoring Building	Monitors 91 m from Airport Road	ADT 15,600
	Monitors 548 m from Mem. Pkwy	ADT 88,057**
New Monitoring Building	Monitors 340 m from Airport Road	
	Monitors 783 m from Mem. Pkwy	
Site 0022	Monitor 30 m from Capshaw Road	ADT 12,900

ADT = Average Daily Traffic

*Traffic count data as provided by the City of Huntsville Traffic Engineering Department represents 2014, 2016, 2018 and 2019 data.

**ADT counts on Memorial Parkway immediately north and south of Airport Road averaged.

Special Purpose Monitors

The PM₁₀ SPM is operated Monday – Friday from 3:00 p.m. to 3:00 p.m. This data is used in reporting the daily Air Quality Index (AQI) to the local print and television media.

Continuous PM_{2.5} monitoring is required in relation to the minimum SLAMS monitoring requirement stated above; i.e., equal to at least one-half (round up) the minimum monitoring requirement. Huntsville is, therefore, required to operate one continuous PM_{2.5} monitor. This monitor is a non-FRM/FEM/ARM. This data is used to support public reporting and forecasting of the Air Quality Index.

Site #	Site Name	Pollutant	Monitoring Objective	Current Spatial Scale based on ADT* for nearest streets	Scale Meets Objective
0003	Downtown Garage (AQI Reporting Site)	PM ₁₀	Population	Neighborhood	Yes
0014	Airport Road	PM _{2.5}	Population	Urban	Yes

AIR MONITORING NETWORK DESCRIPTION

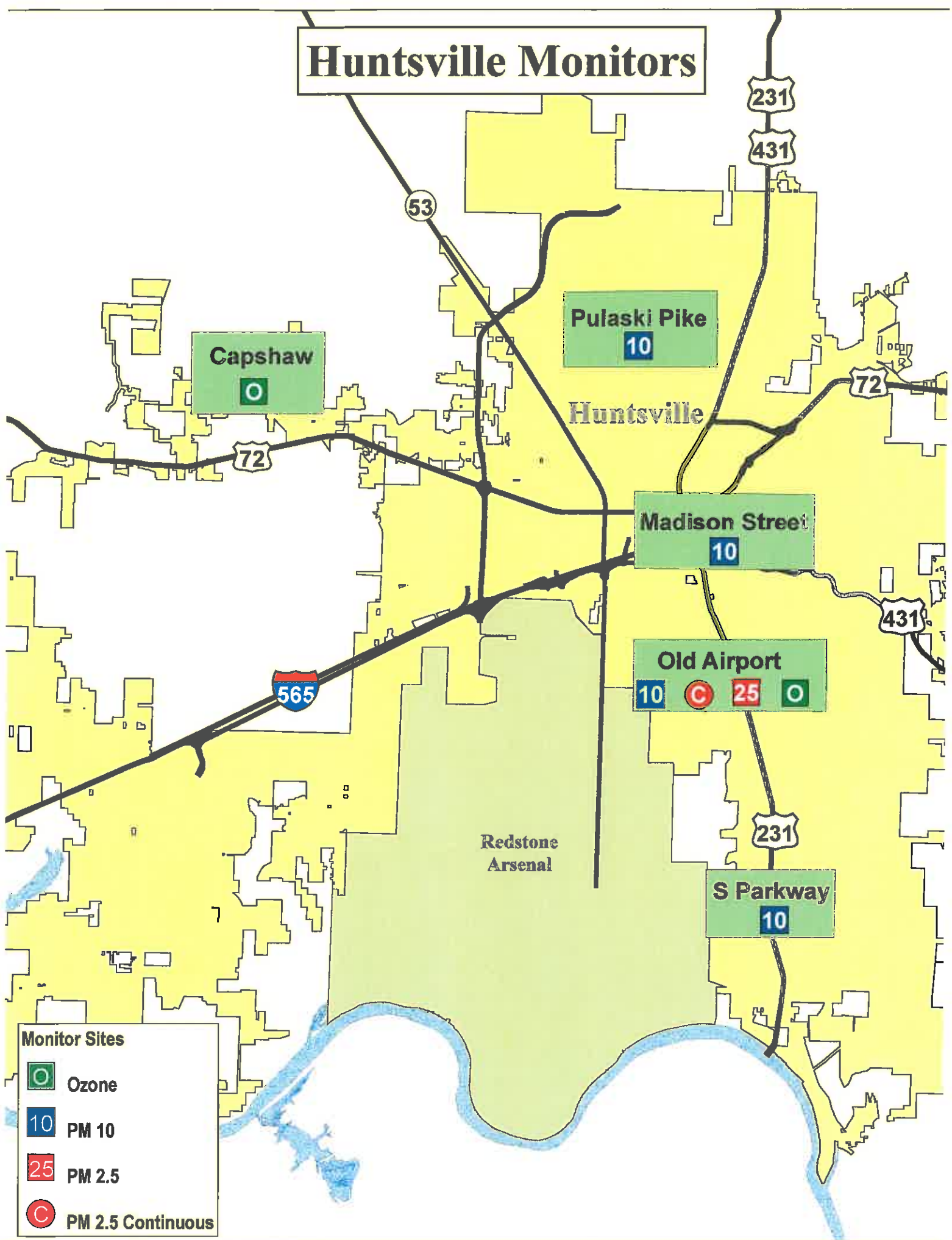
(As of May 2020)

Site ID	Pollutant(s) Monitored	Methodology	Operating Schedule	Monitoring Objective	Spatial Scale	CBSA/MSA Represented	Site/Monitor Type	Begin Sampling	End Sampling
01-089-0002 Pulaski Pike	PM10*	SSI Hi - Vol	6 - Day	Population	Neighborhood	Huntsville	SLAMS	01/01/91	Active
01-089-0003 Downtown Garage	PM10	SSI Hi - Vol	Weekday	Population	Neighborhood	Huntsville	SPM	04/01/93	Active
01-089-0004 South Parkway	PM10*	SSI Hi - Vol	6 - Day	High Conc.	Middle	Huntsville	SLAMS	06/28/90	Active
01-089-0014 Huntsville Old Airport Road	PM10*	SSI Hi - Vol	6 - Day	Population	Urban	Huntsville	SLAMS	07/01/88	Active
	PM2.5*	SSI Lo - Vol	3 -- Day	Population	Urban	Huntsville	SLAMS	01/01/99	Active
	PM2.5	SSI Lo - Vol	Continuous	Population	Urban	Huntsville	SPM	10/09/03	Active
	Ozone*	UV Photometric	Continuous	Population	Neighborhood	Huntsville	SLAMS	01/01/75	Active
01-089-0022 Capshaw	Ozone*	UV Photometric	Continuous	High Conc.	Urban	Huntsville	SLAMS	07/01/11	Active

*Sites used for NAAQS comparison.

Site ID	Location	Geographical Coordinate	Three Closest Roads	Proposed Changes
01-089-0002 Pulaski Pike	5006 Pulaski Pike Huntsville, AL 35810	Latitude +34.788333 Longitude -86.616111	Pulaski Pike Stag Run Winchester Road	None Proposed
01-089-0003 Downtown Garage	Madison St. - Garage Huntsville, AL 35801	Latitude +34.728740 Longitude -86.585010	Madison Street Gates Street Fountain Circle	None Proposed
01-089-0004 South Parkway	11525 S. Memorial Pkwy Huntsville, AL 35803	Latitude +34.620278 Longitude -86.566389	South Memorial Parkway Redstone Road Hobbs Road	None Proposed
01-089-0014 Airport Road	Original Building Old Airport - Airport Rd. New Building 2165 Airport Rd. SW Huntsville, AL 35802	Latitude +34.687670 Longitude -86.586370 Latitude 34.68547 Longitude -86.58816	Airport Road Memorial Parkway Leeman Ferry Road	Site currently undergoing relocation to new building located approximately 1,100 feet SW of previous location.
01-089-0022 Capshaw	1130 Capshaw Road Huntsville, AL 35757	Latitude +34.772727 Longitude -86.756174	Capshaw Road Wall Triana Highway Balch Road	None Proposed

Huntsville Monitors



AIR MONITORING EQUIPMENT

EQUIPMENT DESCRIPTION	MODEL	PURCHASED	S/N	COST	CONDITION	ESTIMATED USEFUL LIFE (YRS)	COMMENTS
AAA MODULAR TRAILER	TA-822	1986	41053	8,894.00	GOOD	(24 years old)	TO BE DETERMINED
HYAC WINDOW HEAT/PUMP UNIT		1986					
ANDERSEN PM10 SAMPLER	1200	1990	3368		FAIR	(30 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1990	3365		FAIR	(30 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1990	3362		FAIR	(30 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1990	3363		FAIR	(30 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1990	1071		FAIR	(30 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1988	2802	2,750.00	FAIR	(32 years old)	NO REPLACEMENT SCHEDULED
ANDERSEN PM10 SAMPLER	1200	1988	2803	2,750.00	FAIR	(32 years old)	NO REPLACEMENT SCHEDULED
TELEDYNE API U.V. PHOTOMETER	T703	2011	90	8,458.50	GOOD	(9 years old)	TO BE DETERMINED
TELEDYNE API U.V. PHOTOMETER	T703	2010	53	8,280.80	GOOD	(10 years old)	TO BE DETERMINED
TELEDYNE API OZONE MONITOR	T400	2012	304	7,983.80	GOOD	(7 years old)	TO BE DETERMINED
TELEDYNE API OZONE MONITOR	T400	2010	62	6375.20	GOOD	(10 years old)	TO BE DETERMINED
ENVIRONICS CALIBRATOR	8103	2005	3570	8,044.09	FAIR	(15 years old)	TO BE DETERMINED
ENVIRONICS CALIBRATOR	8100	2014	6200	8,775.00	GOOD	(8 years old)	
AGILAIRE DATA LOGGER	8872	2019	993	8,680.00	GOOD	(1 year old)	TO BE DETERMINED
AGILAIRE DATA LOGGER	8872	2017	739	8,780.00	GOOD	(2 year old)	TO BE DETERMINED
ESC DATA LOGGER	8832	2010	7,700.00	GOOD	(10 years old)	TO BE DETERMINED	
ESC DATA LOGGER	8816	2003	4815	5,505.87	FAIR	(17 years old)	TO BE DETERMINED
ESC DATA SOFTWARE / AMBIENT, DIGITREND	AirVision	2010	Software Agreement	2,940.00	GOOD	(10 years old)	TO BE DETERMINED
ESC DATA SOFTWARE / AMBIENT REMOTE	AirVision (2 sites)	2010		6,125.00	GOOD	(10 years old)	TO BE DETERMINED
TELEDYNE API PM2.5/PM10 CONTINUOUS MONIT	TS40x	2016		37,810.00	EXCELLENT	(1 year old)	TO BE DETERMINED
THERMO R&P PM2.5 CONTINUOUS MONITOR	TEOM	2003	140AB245730304	22,305.00	GOOD	(17 years old)	TO BE DETERMINED
THERMO R&P PM2.5 SEQUENTIAL AIR MONITOR	2025i	2016	2025iW2 1074 1606	17,969.00	EXCELLENT	(4 year old)	TO BE DETERMINED
THERMO R&P PM2.5 SEQUENTIAL AIR MONITOR	2025	1998	2025A201898803	10,281.30	GOOD	(22 years old)	TO BE DETERMINED
THERMO R&P PM2.5 SEQUENTIAL AIR MONITOR	2025	2007	2025B221007712	13,467.14	GOOD	(13 years old)	TO BE DETERMINED
R.M. YOUNG MET SYSTEM	8201	2007	WT15773	775.00	GOOD	(13 years old)	TO BE DETERMINED

BACK-UP EQUIPMENT DESCRIPTION	MODEL	PURCHASED	S/N	COST	CONDITION	ESTIMATED USEFUL LIFE (YRS)	COMMENTS
TELEDYNE API OZONE MONITOR	M400E	2002	641	6,226.70	FAIR	(18 years old)	REPLACED IN 2012
TELEDYNE API ZERO AIR SYSTEM	701	2008	2107	2,680.00	FAIR	(14 years old)	
TELEDYNE API U.V. PHOTOMETER	401X	2006	384	6,840.00	FAIR	(14 years old)	
API OZONE MONITOR	400	1985	393	5,896.00	FAIR	(25 years old)	REPLACED IN 2002
ENVIRONICS CALIBRATOR	S-100-P	1992	1818	9,350.00	POOR	(28 years old)	REPLACED IN 2005
ESC DATA LOGGER W/CARTRIDGE	8800S/08-0000	1994	1382	5,135.00	FAIR	(26 years old)	NO REPLACEMENT SCHEDULED
ESC DATA LOGGER	8800S/08-0000	2000	1848	5,180.00	FAIR	(20 years old)	REPLACED IN 2005
ESC DATA SOFTWARE / AMBIENT, DIGITREND	VER 5.40	2003		3,400.00	FAIR	(17 years old)	Upgraded in 2010
ESC DATA SOFTWARE / AMBIENT REMOTE	VER 5.40 (UPGRADE 3.0)	2003		1,500.00	FAIR	(17 years old)	Upgraded in 2010
R&P PM2.5 SEQUENTIAL AIR MONITOR	2025	1998	2025A201849803	10,281.30	POOR	(22 years old)	REPLACED IN 2007
SOLTEC STRIP CHART RECORDER	1241	2007	1878	1795.98	GOOD	(13 years old)	PHASED OUT REPLACED BY SOFTW
API MULTIGAS CALIBRATOR	700	1987	255	11,388.75	FAIR	(23 years old)	REPLACED IN 2011

5/28/2020

Site #	Site Name	Pollutant	Monitoring Objective	Current Spatial Scale based on ADT* for nearest streets	Scale Meets Objective
0002	Pulaski	PM ₁₀	Population	Neighborhood	Yes
0004	South Parkway	PM ₁₀	High Conc.	Middle	Yes
0014	Airport Road	PM ₁₀	Population	Urban	Yes
0014	Airport Road	PM _{2.5}	Population	Urban	Yes
0014	Airport Road	O ₃	Population	Neighborhood	Yes
0022	Capshaw	O ₃	High Conc.	Urban	Yes

Site #	Site Name	Pollutant	Monitoring Objective	Current Spatial Scale based on ADT* for nearest streets	Scale Meets Objective
0003	Downtown Garage (AQI Reporting Site)	PM ₁₀	Population	Neighborhood	Yes
0014	Airport Road	PM _{2.5}	Population	Urban	Yes

Fire Station #10 Site
 5006 Pulaski Pike
 Huntsville, Alabama 35810
 Madison County

AQS Site ID: 01-089-0002
 Latitude: 34.788333
 Longitude: -86.616111



AERIAL PHOTOGRAPH 1/4 mile radius

Pollutant	Scale	Type	Monitoring Objective/CBSA	Method	Schedule	NAAQS	Date Began	Date Ended	Comment
PM-10	N	S	Population	H	6	Y	1/1/1991	Active	



NORTH



SOUTH



EAST



WEST

Pollutant	Distance between collocated inlets	Height Of inlet	Distance of probe or inlet from trees	Distance of probe or inlet from dripline of trees	Distance of probe or monitor from roadway (nearest pavement)	Type of ground cover around site	Probe material
PM-10	N/A	4.3m	24.4m	12.3m	30.5m	Asphalt Grass	N/A

Fire Station #7 Site
 11545 S. Memorial Parkway
 Huntsville, Alabama 35803
 Madison County

AQS Site ID: 01-089-0004
 Latitude: 34.620278
 Longitude: -86.566389



AERIAL PHOTOGRAPH ¼ mile radius

Pollutant	Scale	Type	Monitoring Objective/CBSA	Method	Schedule	NAAQS	Date Began	Date Ended	Comment
PM-10	M	S	High Concentration	H	6	Y	6/28/1990	Active	



NORTH



SOUTH



EAST



WEST

Monitor	Distance between collocated inlets	Height of inlet	Distance of probe or inlet from trees	Distance of probe or inlet from dripline of trees	Distance of probe or monitor From roadway (nearest pavement)	Type of ground Cover Around site	Probe material
PM-10	N/A	4.3m	83.8m	77.7m	30.5m	Asphalt Grass	N/A

Old Airport Site
 (Old Monitoring Building-Relocation in Progress)
 2201 John Hunt Park
 Huntsville, Alabama 35805
 Madison County

AQS Site ID: 01-089-0014
 Latitude: 34.68767
 Longitude: -86.58637



AERIAL PHOTOGRAPH ¼ mile radius

Pollutant	Scale	Type	Monitoring Objective/CBSA	Method	Schedule	NAAQS	Date Began	Date Ended	Comment
PM 2.5	U	S	Population	L	C	N	10/9/2003	Active	
Ozone	U	S	Population	UV	C	Y	1/01/1975	Active	



NORTH



SOUTH



EAST



WEST

Monitor	Distance between collocated inlets	Height of inlet	Distance of probe or inlet from trees	Distance of probe or inlet from dripline of trees	Distance of probe or monitor From roadway (nearest pavement)	Type of ground Cover Around site	Probe material
TEOM	N/A	4.5m	30.5m	24.4m	91m	Grass, Asphalt	Teflon
T400	N/A	4.5m	30.5m	24.4m	91m	Grass, Asphalt	Teflon

Old Airport Site
 (New Monitoring Building-Relocation in Progress)
 2165 Airport Road SW
 Huntsville, Alabama 35805
 Madison County

AQS Site ID: 01-089-0014
 Latitude: 34.68547
 Longitude: -86.58816



AERIAL PHOTOGRAPH ¼ mile radius

Pollutant	Scale	Type	Monitoring Objective/CBSA	Method	Schedule	NAAQS	Date Began	Date Ended	Comment
PM-10	U	S	Population	H	6	Y	7/01/1988	Active	
PM-10	U	S	Population	H	6	Y	7/01/1988	Active	Collocated
PM 2.5	U	S	Population	L	3	Y	1/01/1999	Active	
PM 2.5	U	S	Population	L	6	Y	1/01/1999	Active	Collocated



NORTH



SOUTH



EAST



WEST

Monitor	Distance between collocated inlets	Height of inlet	Distance of probe or inlet from trees	Distance of probe or inlet from dripline of trees	Distance of probe or monitor from nearest roadway	Type of ground cover around site	Probe material
PM-10		5.9m	36.9m	32m	340m	Grass, Asphalt	N/A
PM-10	2.3m	5.9m	36.9m	32m	340m	Grass, Asphalt	N/A
PM-2.5		5.4m	36.9m	32m	340m	Grass, Asphalt	N/A
PM 2.5	1.2m	5.4m	36.9m	32m	340m	Grass, Asphalt	N/A

Capshaw Road Site
 1130 Capshaw Road
 Huntsville, Alabama 35757
 Madison County

AQS Site ID: 01-089-0022
 Latitude: 34.772727
 Longitude: -86.756174



AERIAL PHOTOGRAPH ¼ mile radius

Pollutant	Scale	Type	Monitoring Objective/CBSA	Method	Schedule	NAAQS	Date Began	Date Ended	Comment
Ozone	U	S	Population Exposure	UV	C	Y	7/1/2011	Active	



NORTH



SOUTH



EAST



WEST

Monitor	Distance Between Collocated inlets	Height of inlet	Distance of probe or inlet from trees	Distance of probe or inlet from dripline of trees	Distance of probe or monitor From roadway (nearest pavement)	Type of ground Cover Around site	Probe Material
T400	N/A	4.0m	48.8m	45.7m	30m	Grass, Ag Field	Teflon

Abbreviations used in Site Description Tables

Scale

N Neighborhood (0.5 – 4 Kilometers)

U Urban (overall citywide conditions, 4 – 50 kilometers)

R Regional (usually rural, with homogeneous geography, tens to hundreds of kilometers)

M Middle Scale

Type

S SLAMS

QA QA Collocated Monitor

SPM Special Purpose Monitor

Operating Schedule

C Continuous Monitor

D Daily 24-hour samples

3 1 24-hour sample every 3 days (on a national schedule)

6 1 24-hour sample every 6 days (on a national schedule)

Methods

H Hi-volume SSI sampler

L Low Volume SSI

T TEOM continuous sampler

U UV photometric ozone sampler

S Hi-Volume Total Suspended Particulate monitor

NAAQS₁

Y,N Data suitable for comparison to NAAQS

₁ Collocated monitors must be operated in the same manner as the federal reference method but one monitor at the site is designated as the main monitor for comparison to NAAQS

Network Plan Review Findings

The existing network as summarized in the attached Air Monitoring Network Description complies with 40 CFR Part 58, Appendices A, C, D, and E requirements.

Redesign of John Hunt's Master Plan necessitated relocation of Site 0014. DNREM in coordination with the Planning, Parks and Recreation and Projects Management Departments identified and approved a suitable permanent location for Site 0014 with EPA granting concurrence in 2018. Construction of a new monitoring building at the approved location was completed in 2019. The relocated site is roughly 1,100 feet southwest of the former site and continues to meet all applicable 40 CFR Part 58 requirements. The monitoring objective and spatial scale for Site 0014 remain unchanged. DNREM is currently in the process of relocating all monitoring equipment to the new building with relocation of PM-10 and PM-2.5 FRM monitors complete. Installation of local area network components and relocation of ozone and PM-2.5 continuous monitoring equipment is currently in progress with completion expected by late 2020.