State of Alabama
Ambient Air Monitoring
2025 Network Plan

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Alabama Department of Environmental Management

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Definitions and Acronyms

AADT	Annual Average Daily Traffic
AAQM	Ambient Air Quality Monitoring
AAQMP	Ambient Air Quality Monitoring Plan
ADEM	Alabama Department of Environmental Management
ARM	Approved Regional Method
AQS	Air Quality System
avg	average
CASTNET	Clean Air Status and Trends Network
CBSA	Core Based Statistical Area
CFR	*Code of Federal Regulations*
CO	Carbon Monoxide
CSA	Combined Statistical Area
CSN	Chemical Speciation Network
EE	Exception Event
EPA	Environmental Protection Agency
FEM	Federal Equivalent Method
FRM	Federal Reference Method
GA EPD	Georgia Department of Natural Resources -Environmental Protection Division
HDNREM	Huntsville Division of Natural Resources and Environmental Management
hr	hour
hi-vol	high-volume sampler
JCDH	Jefferson County Department of Health
low-vol	low-volume particulate sampler
m3	cubic meter
min	minute
ml	milliliter
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCore	National Core multipollutant monitoring station
O_3	ozone
PAMS	Photochemical Assessment Monitoring Station
Pb	lead
PM	particulate matter
$PM_{2.5}$	particulate matter ≤2.5 micrometers diameter
PM_{10}	particulate matter ≤10 micrometers diameter
ppb	parts per billion
PQAO	primary quality assurance organization
PSD	Prevention of Significant Deterioration
PWEI	Population Weighted Emissions Index
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
SLAMS	State or Local Air Monitoring Station
SO2	Sulfur Dioxide
SPM	Special Purpose Monitor
STN ($PM_{2.5}$)	Speciation Trends Network
tpy	tons per year
TSP	Total Suspended Particulate
URG	URG-3000N $PM_{2.5}$ Speciation monitoring carbon-specific sampler
° C	degree Celsius
µg/m^3	micrograms (of pollutant) per cubic meter (of air sampled)
µSA	Micropolitan Statistical Area
≥	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 (40 CFR Part 58) concerning state and local 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 Alabama's air quality surveillance system, lists changes that occurred during 2024/2025, and changes proposed to take place to the current ambient air monitoring network during 2025/2026. Any changes made to the plan after public comment period will be found in Appendix D.

Public Review and Comment

The annual monitoring network review must be made available for public inspection for thirty (30) days prior to submission to the EPA. For monitoring year 2025/2026, this document was placed on ADEM's website on 05/16/2025 to begin a 30-day public review period. This document can be accessed at the following link:

http://www.adem.alabama.gov/newsEvents/publicNotices.cnt

Or by contacting:

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Overview of Alabama's Air Monitoring Network

Ambient air monitors in the state of Alabama are operated for a variety of monitoring objectives. These objectives include determining whether areas of the state meet the National Ambient Air Quality Standards (NAAQS), to provide public information such as participation in the EPA's AirNow program, Air Quality Index (AQI) reporting for larger Metropolitan Statistical Areas (MSAs), for use in Air Quality Models, and to provide data to Air Quality Researchers. Entities in Alabama monitor all six (6) criteria pollutants which have NAAQS identified for them: Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO_2), Ozone (O_3), particulate matter (PM_{10}, $PM_{2.5}$), and Sulfur Dioxide (SO_2). $PM_{2.5}$ speciated compounds, a non-criteria pollutant, is also monitored for special purposes. In addition, meteorological data may be collected to support air monitoring and aid in analysis of the ambient air monitoring data.

In Alabama, the air quality surveillance system is operated by three separate entities: the Alabama Department of Environmental Management (ADEM), and two local agencies, the Jefferson County Department of Health (JCDH), and the Huntsville Department of Natural Resources and Environmental Management (HDNREM). Each agency is responsible for its own annual network plan. This document reflects only the ADEM air quality surveillance system. An overview of the 2025 ADEM Monitoring Network can be found in Table 1.

The JCDH plan will be available for review on their website by following this link. https://jcdh.org/SitePages/Misc/AirProgReports.aspx

The HDNREM plan will be available for review on their website by following this link. https://www.huntsvilleal.gov/environment/air-quality/

Alabama shares a MSA with Georgia on the eastern border. Although each state meets the monitoring requirements of the MSA, attainment status is determined by the combined data set. Details of air monitoring by the State of Georgia in the Columbus, GA-AL MSA are found on their website by following this link.
https://airgeorgia.org/networkplans.html

Currently, the Air Quality Index (AQI) is reported for Huntsville, Birmingham, Mobile, Montgomery and Phenix City on the Internet at the sites listed below.

ADEM	https://adem.alabama.gov/air/historical-ozone-and-pm25-data
JCDH	https://jcdh.org/SitePages/Programs-Services/EnvironmentalHealth/Air-RadiationProtectionDivision/AirQualForecast.aspx
HDNREM	https://www.huntsvilleal.gov/environment/air-quality/air-quality-index-reports/

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Summary of adjustments and proposals for the ADEM AAQMP

Summary of changes in 2024/2025

- **Bay Road, AQS ID 01-097-2005, Chickasaw, AQS ID 01-097-0003,** and **Fairhope, AQS ID 01-003-0010.** ADEM upgraded the Teledyne API T400 ozone analyzers with Nafion dryers to remove moisture to increase precision and accuracy and decrease data loss. The analyzers began sampling March 1, 2025.
- **Troy Lead, AQS ID 01-109-0003**, the sample saver installed on Troy 1 was removed on February 13, 2025, due to poor collocation metrics.
- **Ward, Sumter Co., AQS ID 01-119-0003**, the NO_2 monitor malfunctioned and was returned to the manufacturer for repair. Very limited data was collected in 2024. NO_2 monitoring at the site will officially begin its 24-month evaluation period again in 2025 as soon as feasible.
- **Seals Park, AQS ID 01-097-8001**, the FEM continuous PM_{10} monitor at the site malfunctioned and was removed in December 2024. The monitor has been sent to the manufacturer for repairs and will be returned to the site as soon as it's operational. ADEM will explore other monitor replacement options to collect continuous data, even if they are non-FEM. The primary FRM monitor is fully operational.

Summary of proposed changes for 2025/2026

- **Chickasaw, AQS ID 01-097-0003**, will be shutdown at the end of 2025. All ambient monitoring will relocate to Africatown (01-097-0023).
- **Africatown AQS ID 01-097-0023,** will be established and continue ambient air monitoring in the MSA anticipated by no later than January 1, 2026. ADEM is requesting the AQS IDs be linked from Chickasaw for design value and trend purposes. See justification in Appendix C.
- **Helena, AQS ID 01-117-0004, and Wetumpka Westside Technology Park, AQS ID 1-051-0004,** ADEM will receive new monitoring shelters in late 2025.
- **Lhoist, Montevallo Plant, AQS ID 01-117-9001**, operated by a Lhoist contractor within the ADEM PQAO has met the SLAMS requirements for shutdown and this site will close at the end of 2025. See justification in Appendix C.

Table 1 2025 ADEM Ambient Air Monitoring Network

ADEM Site Common Name	AQS ID	Ozone	PM 2.5 Local	PM 2.5 Local Collocated	PM2.5 Speciation	PM2.5 Continuous	PM10 Lo-Vol	PM10 Lo-Vol Collocated	PM10 Continuous	Lead TSP	Lead TSP Collocated	NO2	SO2
Fairhope	01-003-0010	X				X							
Ashland	01-027-0001					X							
Crossville	01-049-1003					X							
Wetumpka Westside Technology	01-051-0004	X											
Gadsden C College	01-055-0010	X				X							
Chickasaw[1]	01-097-0003	X				X							X
Africatown[2]	01-097-0023	X				X							X
Bay Road	01-097-2005	X											
Seals Park	01-097-8001						X		X				
MOMS, ADEM	01-101-1002	X		X		X	X	X					
Decatur	01-103-0011	X				X							
Troy Lead	01-109-0003									X	X		
Phenix City-South Girard School	01-113-0003	X	X	X	X								
Helena	01-117-0004	X											
Lhoist, Montevallo Plant (DRR)	01-117-9001												X
Ward, Sumter Co.	01-119-0003	X				X						X	X
Duncanville Middle School	01-125-0011	X				X							

1 = Anticipated shutdown on 12/31/25. Relocation of monitoring to Africatown.

2 = Anticipated start date Jan 1, 2026.

Network Plan Description

As per 40 CFR Part 58.10, an annual monitoring network plan which provides for the establishment and maintenance of an air quality surveillance system consisting of the air quality monitors in the state is required to be submitted by all states to the EPA.

Specifically §58.10 (a) requires for each existing and proposed monitoring site:

1. A statement of purpose for each monitor.
2. Evidence that siting and operation of each monitor meets the requirements of Appendices A, C, D, and E of 40 CFR Part 58, where applicable.
3. §58.10 (b) requires the plan contain the following information for each existing and proposed site:
    a. The Air Quality System (AQS) site identification number.
    b. The location, including street address and geographical coordinates.
    c. The sampling and analysis method(s) for each measured parameter.
    d. The operating schedules for each monitor.
    e. Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal.
    f. The monitoring objective and spatial scale of representativeness for each monitor.
    g. The identification of any sites that are suitable and sites that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS as described in §58.30.
    h. The Metropolitan Statistical Area (MSA), Core Based Statistical Area (CBSA), Combined Statistical Area (CSA) or other area represented by the monitor.
    i. The designation of any Pb monitors as either source-oriented or non-source-oriented according to 40 CFR part 58 Appendix D.
    j. Any source-oriented monitors for which a waiver has been requested or granted by the EPA Regional Administrator as allowed for under paragraph 4.5(a)(ii) of 40 CFR part 58 Appendix D.
    k. Any source-oriented or non-source-oriented site for which a waiver has been requested or granted by the EPA Regional Administrator for the use of Pb-PM_{10} monitoring in lieu of Pb-TSP monitoring as allowed for under paragraph 2.10 of Appendix C to 40 CFR part 58.
    l. The identification of required NO_2 monitors as near-road, area-wide, or vulnerable and susceptible population monitors in accordance with Appendix D, section 4.3 of this part.
    m. The identification of any $PM_{2.5}$ or FEMs used in the monitoring agency's network where the data are not of sufficient quality such that data are not to be compared to the NAAQS. For required SLAMS where the agency identifies that the $PM_{2.5}$ Class III FEM does not produce data of sufficient quality for comparison to the NAAQS, the monitoring agency must ensure that an operating FRM or filter-based FEM meeting the sample frequency requirements described in § 58.12 or other Class III $PM_{2.5}$ FEM or ARM with data of sufficient quality is operating and reporting data to meet the network design criteria described in Appendix D to this part.

Monitoring Requirements

Appendix A of 40 CFR Part 58 outlines the Quality Assurance Requirements for SLAMS, SPMs, and PSD Air Monitoring. It details calibration and auditing procedures used to collect valid air quality data, the minimum number of collocated monitoring sites, calculations used for data quality assessments, and reporting requirements. All sites operated by ADEM follow the requirements set forth in Appendix A.

Appendix C of 40 CFR Part 58 specifies the criteria pollutant monitoring methods which must be used in SLAMS and NCore stations. All criteria pollutant monitoring operated by ADEM follow the methods specified in Appendix C.

Appendix D of 40 CFR Part 58 specifies network design criteria for ambient air quality monitoring. The overall design criteria, the minimum number of sites for each parameter, the type of sites, the spatial scale of the sites, and the monitoring objectives of the sites are detailed. In designing the air monitoring network for ADEM, the requirements of Appendix D were followed. The specifics for each pollutant network are in their individual chapters.

Appendix E of 40 CFR Part 58 specifies probe material, placement of the monitoring probe and spacing from obstructions. All monitors operated by ADEM were evaluated against Appendix E criteria.

Population and CBSA

Alabama has a 2024 population estimate of 5,157,699. Alabama's Metropolitan and Micropolitan Core Based Statistical Areas with corresponding classifications as Metropolitan or Micropolitan, county names included in that area, the 2020 population base and the 2024 population estimates are listed in Table 2. Alabama's network is represented in Figure 1.

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 boundaries as defined in the latest U.S. Census information. The term "Core Based Statistical Area" (CBSA) is a collective term for both Metropolitan Statistical Areas (MSA) and Micropolitan Statistical Areas (μSA).

Table 2 Alabama Statistical Areas

Alabama Core Based Statistical Area	Counties in MSA	2020 Population Base	2024 Population Estimate	Statistical Area
Albertville	Marshall	97,609	102,156	Micropolitan
Alexander City	Tallapoosa	41,311	40,699	Micropolitan
Anniston-Oxford	Calhoun	116,437	116,427	Metropolitan
Atlanta--Athens-Clarke County-Sandy Springs, GA-AL (part)		6,977,787	7,340,522	Combined Statistical Area
Auburn-Opelika	Lee, Macon	193,872	206,006	Metropolitan
Birmingham-Cullman-Talladega, AL	Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair, Walker	1,360,993	1,376,853	Combined Statistical Area
Birmingham	Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair, Walker	1,180,600	1,192,583	Metropolitan
Chattanooga-Cleveland-Dalton, TN-GA-AL (part)		975,884	1,016,333	Combined Statistical Area
Columbus-Auburn-Opelika, GA-AL (part)	Russell County in Alabama and Chattahoochee, Harris, Marion, Muscogee, Stewart, Talbot Counties in Georgia	564,055	571,048	Combined Statistical Area
Columbus, GA-AL	Russell County in Alabama and Chattahoochee, Harris, Marion, Muscogee, Stewart, Talbot Counties in Georgia	328,872	324,343	Metropolitan
Cullman	Cullman	87,861	92,604	Micropolitan
Daphne-Fairhope-Foley	Baldwin	231,767	261,608	Metropolitan
Decatur	Lawrence, Morgan	156,510	159,651	Metropolitan
Dothan	Geneva, Henry, Houston	151,016	154,766	Metropolitan
Dothan-Enterprise-Ozark	Geneva, Henry, Houston	253,806	261,191	Combined Statistical Area
Enterprise	Coffee	53,470	56,358	Micropolitan

Alabama Core Based Statistical Area	Counties in MSA	2020 Population Base	2024 Population Estimate	Statistical Area
Eufaula, AL-GA Micro Area	Barbour County, AL and Quitman County, GA	27,460	26,681	Micropolitan
Florence-Muscle Shoals-Russellville	Colbert, Lauderdale	182,903	188,161	Combined Statistical Area
Florence-Muscle Shoals	Colbert, Lauderdale	150,792	156,287	Metropolitan
Fort Payne	DeKalb	71,627	73,122	Micropolitan
Gadsden	Etowah	103,415	103,207	Metropolitan
Huntsville	Limestone, Madison	491,717	542,297	Metropolitan
Huntsville-Decatur-Albertville, AL-TN (part)	Limestone, Madison	852,787	913,977	Combined Statistical Area
LaGrange, GA-AL Micro Area	Chambers County, AL and Troup County, GA	104,124	105,326	Micropolitan
Mobile-Daphne-Fairhope, AL	Mobile	646,577	673,947	Combined Statistical Area
Mobile	Mobile	414,810	412,339	Metropolitan
Montgomery-Selma	Autauga, Elmore, Dallas, Lowndes, Montgomery	424,526	423,430	Combined Statistical Area
Montgomery	Autauga, Elmore, Lowndes, Montgomery	386,056	387,885	Metropolitan
Ozark	Dale	49,320	50,067	Micropolitan
Russellville	Franklin	32,111	31,874	Micropolitan
Scottsboro	Jackson	52,563	53,780	Micropolitan
Selma	Dallas	38,470	35,545	Micropolitan
Talladega-Sylacauga	Coosa, Talladega	92,532	91,666	Micropolitan
Troy	Pike	33,003	33,124	Micropolitan
Tuscaloosa	Greene, Hale, Pickens, Tuscaloosa	269,780	281,963	Metropolitan

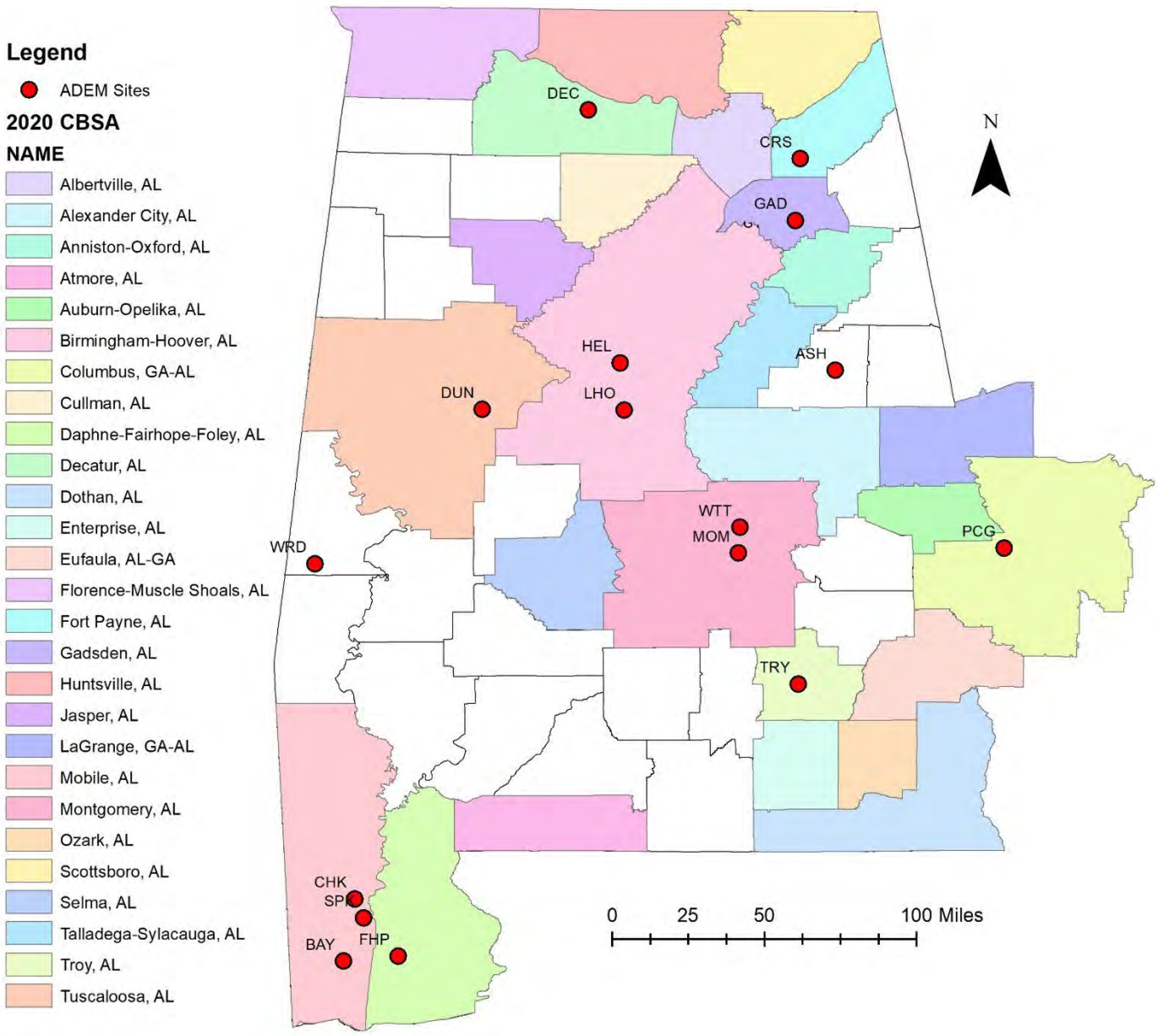


Figure 1 Alabama MSAs and ADEM Monitoring Sites

Types of Monitoring Stations

CASTNET – *Clean Air Status and Trends Network*: is a national air quality monitoring network designed to provide data to assess trends in air quality, atmospheric deposition, and ecological effects due to changes in air pollutant emissions. CASTNET provides long-term monitoring of air quality in rural areas to determine trends in regional atmospheric nitrogen, sulfur, and ozone concentrations and deposition fluxes of sulfur and nitrogen pollutants in order to evaluate the effectiveness of national and regional air pollution control programs. EPA-sponsored CASTNET ozone monitors are Part 58 compliant, therefore the data can be used for regulatory purposes. CASTNET Ozone data is now reported to AQS. There is one CASTNET site in Alabama, **Sand Mountain (SND152), AQS ID 01-049-9991**, in DeKalb County, operated by the EPA.

NCore – *National Core multi-pollutant monitoring station*: Sites that measure multiple pollutants at trace levels in order to provide support to integrated air quality management data needs. Each state is required to operate at least one NCore site. There is one NCore site in Alabama, **North Birmingham, AQS ID 01-073-0023**, located in Jefferson County and operated by JCDH. Refer to the JCDH Ambient Air Network Plan for details.

PAMS – *Photochemical Assessment Monitoring Station*: PAMS are established to obtain more comprehensive data in areas with high levels of ozone pollution by also monitoring oxides of Nitrogen (NOx) and volatile organic compounds (VOCs). PAMS monitoring requirements were revised in the 2016 ozone NAAQS rule and a PAMS site is required in Jefferson County. Refer to the JCDH Ambient Air Network Plan for details.

SLAMS - *State or Local Ambient Monitoring Station*: SLAMS make up ambient air quality monitoring sites that are primarily needed for NAAQS comparisons. ADEM SLAMS monitors are described in detail in the section labeled ADEM's Pollutant Network Tables.

SPM – *Special Purpose Monitor:* **Ward, Sumter Co., AQS ID 01-119-0003**, will begin its 24-month evaluation period for NO_2 with a Teledyne N500, CAPS NOx Analyzer as soon as equipment is repaired. **Seals Park, AQS ID 01-097-8001**, began sampling on July 1, 2024, with two special purpose monitors for PM_{10} with an FRM local sampler and an FEM E-BAM continuous sampler for the purpose of calculating a valid design value for PM_{10} in the MSA.

SO2 DRR - *SO2 Data Requirements Rule*: DRR became effective September 21, 2015. Per 40 CFR Part 51, states are required to report all sources that generate >2,000 tpy SO2, not dependent upon population density. Each source in this category must characterize air quality through air quality modeling or ambient air monitoring. The annual progress report for sources that utilized modeling can be found in Appendix B. A source that chooses monitoring must operate a site equivalent with the SLAMS requirements of 40 CFR Part 58. Alabama has one DRR SO2 monitoring site, **Lhoist, Montevallo Plant, AQS ID 01-117-9001**, operated by a Lhoist contractor within the ADEM PQAO. The Lhoist-Montevallo facility was designated attainment/unclassifiable on March 26, 2021 under Round IV of the SO2 DRR, based on 2017-2019 monitoring data.

STN – *$PM_{2.5}$ Speciation Trends Network*: A $PM_{2.5}$ speciation station designated to be part of the speciation trends network. This network provides chemical species data of fine particulates. There is one STN site in Alabama, **North Birmingham, AQS ID 01-073-0023**, located in Jefferson County and operated by JCDH. Refer to the JCDH Ambient Air Network Plan for details.

Supplemental Speciation – A monitoring site that is not dedicated as an STN site in the Chemical Speciation Network, but has monitors used to gain supplemental data for that network. ADEM provides supplemental speciation data from **Phenix City-South Girard School, AQS ID 01-113-0003.**

ADEM's Monitoring Networks by Pollutant

Carbon Monoxide (CO) Network

On August 12, 2011, the EPA issued a final rule that retained the existing NAAQS for Carbon Monoxide (CO) and made changes to the ambient air monitoring requirements. The EPA revised the minimum requirements for CO monitoring by requiring CO monitors to be collocated with one required near-road NO_2 monitor in CBSAs having a population of 1,000,000 or more persons. ADEM does not operate a near-road monitoring site or CO monitor. For more information regarding CO monitoring in Alabama refer to the JCDH Ambient Air Network Plan for details.

Lead (Pb) Network

In 2008, the EPA revised the NAAQS for lead (Pb). The Pb standard was lowered from 1.5 ug/m^3 for a quarterly average to 0.15 ug/m^3 based on the highest rolling 3-month average over a 3-year period. The EPA set minimum monitoring requirements for source and population oriented monitoring. Source oriented monitoring is required near sources that have Pb emissions ≥1 ton per year. Population oriented monitoring is required for CBSAs >500,000. In December 2010, the EPA revised the Pb rule to require source-oriented monitors for sources greater than ½ ton per year (tpy) and stated that population oriented monitors would be located at NCore sites. In March 2016, the EPA removed the requirement for Pb monitoring at NCore sites that were not located near a Pb emissions source.

After the initial 2010 ruling, two sources were identified that exceeded the 0.5 tpy threshold: Sanders Lead Company and the Anniston Army Depot. Since then, updated emissions inventories have reduced that to one identified source, Sanders Lead Company, Inc., located in Troy, Pike County, a Micropolitan statistical area, which emits greater than ½ ton of Pb per year. **Troy Lead, AQS ID 01-109-0003,** operated by ADEM, has been monitoring for Pb near that source since 1979. To meet QA requirements, collocated lead monitoring is also occurring at this site. A "sample saver" device, intended to ensure sample integrity, was installed on the primary monitor on October 4, 2023. Although the sample saver was not supposed to have any appreciable effect on the monitor, the two monitors were statistically different in 2024. Numerous malfunctions with the sample saver caused quality assurance issues and voided filters. After a full year of operations with the sample saver on the primary monitor, ADEM removed it on February 13, 2025. No additional quality assurance issues are anticipated during this calendar year as both monitors are now identical. No additional changes are anticipated.

Ozone (O_3) Network

Effective December 28, 2015, the level of the NAAQS for ozone was changed from 0.075 to 0.070 ppm. To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.070 ppm. Minimum monitoring requirements for ozone are based on population and whether the design value is <85% of the NAAQS, or ≥85% of the NAAQS (See Table 3). Since the NAAQS for ozone is 0.070 parts per million of ozone, then 85% of the NAAQS truncated is **0.059** ppm. ADEM's Ozone Monitoring Sites and Design Values using 2021-2024 data are described in Table 4.

Table 3 SLAMS Minimum Ozone Monitoring Site Requirements

SLAMS MINIMUM OZONE MONITORING REQUIREMENTS		
MSA population[1, 2]	Most recent 3-year design value concentrations ≥85% of any O_3 NAAQS[3]	Most recent 3-year design value concentrations <85% of any O_3 NAAQS[3,4]
>10 million	4	2
4–10 million	3	1
350,000–<4 million	2	1
50,000–<350,000[5]	1	0

1 Minimum monitoring requirements apply to the Metropolitan statistical area (MSA).
2 Population based on latest available census figures.
3 The ozone (O_3) National Ambient Air Quality Standards (NAAQS) levels and forms are defined in 40 CFR part 50.
4 These minimum monitoring requirements apply in the absence of a design value.
5 Metropolitan statistical areas (MSA) must contain an urbanized area of 50,000 or more population.

Table 4 ADEM Ozone Monitoring Sites and Design Values

Site Name	AQS ID	2022-2024 Design Values	MSA	MSA MAX DV	2024 Population Base
Helena[1]	01-117-0004	0.065	Birmingham-Hoover[3]	0.069	1,192,583
Phenix City - South Girard School[1]	01-113-0003	0.061	Columbus, GA-AL	0.061	324,343
Fairhope	01-003-0010	0.063	Daphne-Fairhope-Foley	0.063	261,608
Decatur	01-103-0011	0.065	Decatur	0.065	159,651
Gadsden Community College[2]	01-055-0011	0.061	Gadsden	0.061	103,207
Chickasaw	01-097-0003	0.061	Mobile	0.061	412,339
Bay Road	01-097-2005	0.060			
Wetumpka Westside Technology	01-051-0004	0.057	Montgomery	0.061	387,885
MOMS, ADEM	01-101-1002	0.061			
Duncanville Middle School	01-125-0011	0.061	Tuscaloosa	0.061	281,963
Ward, Sumter Co.	01-119-0003	0.054	not in MSA	N/A	NA
DV ≥ 85% of the NAAQS					
1 Only site within MSA operated by ADEM. MSA MAX DV may be obtained from monitors not operated by ADEM.					
2 Replaced Southside for ozone monitoring in Gadsden MSA beginning March 2024.					
3 One JCHD monitor lacked enough valid data to calculate design value.					

Ozone Monitoring Requirements for Alabama MSAs

Birmingham-Hoover MSA

Using the Birmingham-Hoover MSA 2024 population estimate and the design value from Table 4, two Ozone monitors are required in this MSA. ADEM operates **Helena, AQS ID 01-117-0004**, in Shelby County. Other ozone sites in this MSA are located within the jurisdiction of the JCDH. For more information regarding ozone monitoring in Jefferson County refer to the JCDH ambient air network plan. ADEM is planning to upgrade the shelter at this site in late 2025 using IRA funding.

Columbus, GA-AL MSA

Using the Columbus GA-AL MSA 2024 population estimate and the design value from Table 4, one Ozone monitor is required for this MSA. ADEM operates one ozone monitor at **Phenix City-South Girard School, AQS ID 01-113-0003**, in Russell County, Alabama. For more information regarding other ozone monitoring in this MSA, refer to the State of Georgia's ambient air network plan. No changes are planned.

Daphne-Fairhope-Foley MSA

Using the Daphne-Fairhope-Foley MSA 2024 population estimate and the design value from Table 4, one Ozone monitor is required for this MSA. There is currently one Ozone site, **Fairhope, AQS ID 01-003-0010** in Baldwin County, Alabama. ADEM updated the ozone analyzer at this site in 2025 using IRA funding with an analyzer equipped with a Nafion dryer.

Decatur MSA

Using the Decatur MSA 2024 population estimate and the design value from Table 4, one Ozone monitor is required for this MSA. There is currently one Ozone site, **Decatur, AQS ID 01-103-0011**, in Morgan County, Alabama. No changes are planned.

Gadsden MSA

Using the Gadsden MSA 2024 population estimate and the design value from Table 4, one Ozone monitor is required for this MSA. There is currently one Ozone site, **Gadsden Community College, AQS ID 01-055-0010**, in Etowah County, Alabama that continued from **Southside, AQS ID 01-055-0011** starting at the beginning of the 2024 ozone season. No further changes are planned.

Huntsville MSA

ADEM does not operate any ozone monitors in this MSA. For information regarding ozone monitoring in Huntsville refer to the HDNREM ambient air network plan.

Mobile MSA

Using the Mobile MSA 2024 population estimate and the design value from Table 4, two Ozone monitors are required for this MSA. There are currently two Ozone sites, **Chickasaw, AQS ID 01-097-0003, and Bay Road, 01-097-2005**, both in Mobile County, Alabama. ADEM updated the ozone analyzers at these sites in 2025 using IRA funding with analyzers equipped with a Nafion dryer. ADEM is moving all monitoring from **Chickasaw, AQS ID 01-097-0003** to **Africatown, AQS ID 01-097-0023**, in 2026; Please see Appendix C for site details.

Montgomery MSA

Using the Montgomery MSA 2024 population estimate and the design value from Table 4, two Ozone monitors are required for this MSA. There are currently two Ozone sites, **MOMS, ADEM, AQS ID 01-101-1002**, in Montgomery County, Alabama, and **Wetumpka Westside Technology Park, AQS ID 01-051-0004** in Elmore County, Alabama. ADEM is planning to upgrade the shelter at Wetumpka in late 2025 using IRA funding.

Tuscaloosa MSA

Using the Tuscaloosa MSA 2024 population estimate and design value from Table 4, one Ozone monitor is required for this MSA. There is currently one Ozone site, **Duncanville Middle School, AQS ID 01-125-0011** in Tuscaloosa County, Alabama. No changes are planned.

Anniston-Oxford and Auburn-Opelika MSAs

The MSAs of Auburn-Opelika and Anniston-Oxford were evaluated by ADEM during the 5-year assessment. It was determined that due to the close proximity of ozone monitors in the neighboring MSAs, additional ozone monitors would not be needed. Since these areas do not have design values, no ozone monitors are required by Appendix D of 40 CFR Part 58.

Sites not located in an MSA

Ward, Sumter Co., AQS ID 01-119-0003, represents rural, background ozone values for the state. The historical design values for this monitor have been less than 85% of the NAAQS. No changes are planned.

Nitrogen Dioxide (NO_2) Network

On January 22, 2010, the EPA finalized the monitoring rules for Nitrogen Dioxide (NO_2). The rules require the placement of NO_2 monitors near a major road in each CBSA with a population ≥500,000 people and a second monitor is required near another major road in areas with either a CBSA population ≥2.5 million people, or one or more road segments with an annual average daily traffic (AADT) count ≥250,000 vehicles. For near road NO_2 monitoring, Birmingham-Hoover is the only MSA in Alabama with a population greater than 500,000. However, the population is less than 2.5 million and there are no road segments with AADT greater than 250,000 vehicles. The rules also require an NO_2 monitor to be placed in any urban area with a population greater than or equal to 1 million people to assess community-wide concentrations. Birmingham-Hoover is the only MSA in Alabama with a population greater than 1 million. Refer to the JCDH Ambient Air Network Plan for details. **Ward, Sumter Co., AQS ID 01-119-0003**, began its 24-month evaluation period for NO_2 with a Teledyne N500, CAPS NOx Analyzer in July 2024**,** but after only a couple of months, the monitor malfunctioned. The repair and upgrade required the monitor to be sent back to the manufacturer. The start date for NO_2 at Ward has been pushed back tentatively to July 2025, however, ADEM will begin monitoring whenever the equipment is repaired, returned, and operational. ADEM requests the exclusion flag be placed on the data and the monitor be designated SPM while undergoing its evaluation period.

$PM_{2.5}$ Network

Minimum monitoring requirements for $PM_{2.5}$ are based on population and whether the design value is <85% of the NAAQS, or ≥85% of the NAAQS (See Table 5). Additionally, a regional background site and a regional transport site are required.

Also, CBSAs with populations greater than one million but less than four million were required to operate a $PM_{2.5}$ monitor at its NO_2 near road site by January 1, 2017. ADEM does not operate an NO_2 near road site. More information regarding this requirement in Alabama can be found in the JCDH ambient air network plan.

As discussed below for each of these requirements, ADEM meets or exceeds the minimum requirements under 40 CFR Part 58, Appendix D, Section 4.7 in all MSAs. On March 6, 2024, U.S. EPA finalized rulemaking (89 FR 16202) to lower the annual $PM_{2.5}$ NAAQS from 12.0 µg/m3 to 9.0 µg/m3. Within the state, two MSAs currently exceed the new standard, Birmingham-Hoover and Columbus, GA-AL. More information regarding JCHD's effort to meet criteria in the Birmingham-Hoover MSA can be found in the JCDH ambient air network plan. ADEM and the Georgia Environmental Protection Division (GA EPD) have each submitted exceptional event (EE) justifications for selected days between 2022 and 2024. Final ruling on the EE and MSA designation are expected in February 2026. If any additional monitoring is required after designations, ADEM will amend the network in the next annual network plan.

$PM_{2.5}$ design values in Table 6 are based on 2021-2024 data. Design values must be less than **29.75** ug/m^3 (85% of the NAAQS) to meet the 24-hour standard of 35 ug/m^3 and less than **7.65** ug/m^3 (85% of the NAAQS) to meet the annual standard of 9 ug/m^3 (effective February 7, 2024).

Table 5 $PM_{2.5}$ Minimum Monitoring Site Requirements

$PM_{2.5}$ MINIMUM MONITORING REQUIREMENTS		
MSA population [1,2]	Most recent 3-year design value ≥85% of any $PM_{2.5}$ NAAQS[3]	Most recent 3-year design value<85% of any $PM_{2.5}$ NAAQS[3,4]
>1,000,000	3	2
500,000–1,000,000	2	1
50,000–<500,000 [5]	1	0

1 Minimum monitoring requirements apply to the Metropolitan statistical area (MSA).
2 Population based on latest available census figures.
3 The $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) levels and forms are defined in 40 CFR part 50.
4 These minimum monitoring requirements apply in the absence of a design value.
5 Metropolitan statistical areas (MSA) must contain an urbanized area of 50,000 or more population.

Section 4.7.2 of Appendix D of 40 CFR Part 58 requires a collocated continuous $PM_{2.5}$ monitor in each MSA that is required to have a FRM monitor. The number of collocated continuous monitors required for an MSA will be equal to at least half of the required FRM monitors for that MSA. This is not required if the continuous monitor is a FEM that is labeled as the primary and comparable to the NAAQS. The state is also required to operate $PM_{2.5}$ speciation monitors to characterize the constituents of $PM_{2.5}$. The number of speciation monitors is determined by the EPA Region IV.

Continuous $PM_{2.5}$ monitors satisfy the reporting requirement by submitting data to AirNow. Every Alabama MSA with the exception of Birmingham-Hoover has a population less than 500,000. ADEM's $PM_{2.5}$ Network is described in Table 6.

Table 6 ADEM $PM_{2.5}$ Monitoring Sites and Design Values

Site Name	AQS Site ID	PM2.5 24 hr DV 2022-2024	PM2.5 Annual DV 2022-2024	MSA	24hr MSA MAX DV	Annual MSA MAX DV	2024 Population Base
Phenix City - South Girard School[1]	01-113-0003	23	9.1	Columbus, GA-AL	23	9.6	324,343
Fairhope	01-003-0010	16	7.3	Daphne-Fairhope-Foley	16	7.3	261,608
Decatur	01-103-0011	17	7.4	Decatur	17	7.4	159,651
Gadsden Community College	01-055-0010	20	8.9	Gadsden	20	8.9	103,207
Chickasaw	01-097-0003	17	8.2	Mobile	17	8.2	412,339
MOMS, ADEM	01-101-1002	19	8.4	Montgomery	19	8.4	387,885
Duncanville Middle School	01-125-0011	18	7.1	Tuscaloosa	18	7.1	281,963
Ashland (Regional Transport)	01-027-0001	17	6.9	Not in MSA	NA	NA	NA
Crossville (Background)	01-049-1003	17	7.4	Not in MSA	NA	NA	NA
Ward (Background)	01-119-0003	16	6.0	Not in MSA	NA	NA	NA
DV ≥ 85% of the 2024 NAAQS							

[1] Only site within MSA operated by ADEM. MSA MAX DV may be obtained from monitors not operated by ADEM. ADEM and GA EPD have submitted exceptional event justifications for select data between 2022-2024; Design Values currently exceed the new standard. Final designations against the new standard will be made by EPA in in February 2026.

$PM_{2.5}$ Monitoring Requirements for Alabama MSAs

Birmingham-Hoover MSA

ADEM does not operate $PM_{2.5}$ monitors in the Birmingham-Hoover MSA. For more information regarding $PM_{2.5}$ monitoring in this MSA refer to the JCDH ambient air network plan.

Columbus, GA-AL MSA

Using Columbus, GA-AL MSA 2024 population base and the design value from Table 6, one FRM monitor is required. ADEM operates one FRM monitor on a 1 in 3 day frequency, one collocated FRM monitor on a 1 in 6 day frequency for quality assurance, and one speciation monitor at **Phenix City – South Girard School, AQS ID 01-113-0003**. No changes are planned. For more information regarding other $PM_{2.5}$ monitoring in this MSA refer to the State of Georgia's ambient air network plan.

Daphne-Fairhope-Foley MSA

Using the Daphne-Fairhope-Foley MSA 2024 population base and the design value from Table 6, zero FRM monitors are required. There is currently one FEM BAM-1022 $PM_{2.5}$ continuous monitor located at **Fairhope, AQS ID 01-003-0010**. No changes are planned.

Decatur MSA

Using the Decatur MSA 2024 population base and the design value from Table 6, zero FRM monitors are required. There is currently one FEM BAM-1022 $PM_{2.5}$ continuous monitor located at **Decatur, AQS ID 01-103-0011**. No changes are planned.

Gadsden MSA

Using the Gadsden MSA 2024 population base and the design value from Table 6, one FRM monitor is required. There is currently one FEM BAM-1022 $PM_{2.5}$ continuous monitor at **Gadsden Community College, AQS ID 01-055-0010**. No changes are planned.

Huntsville MSA

ADEM does not operate $PM_{2.5}$ monitors in the Huntsville MSA. For information regarding $PM_{2.5}$ monitoring in this MSA refer to the HDNREM ambient air network plan.

Mobile MSA

Using the Mobile MSA 2024 population base and the design value from Table 6, one FRM monitor is required. There is currently one FEM BAM-1022 continuous monitor located at **Chickasaw, AQS ID 01-097-0003**. ADEM is moving all monitoring from **Chickasaw, AQS ID 01-097-0003** to **Africatown, AQS ID 01-097-0023**, in 2026. Please see Appendix C for site details.

Montgomery MSA

Using the Montgomery MSA 2024 population base and the design value from Table 6, one FRM monitor is required. There is currently one FEM BAM-1022 $PM_{2.5}$ continuous monitor and one collocated FRM monitor on a 1 in 3 day frequency for quality assurance located at **MOMS, ADEM, AQS ID 01-101-1002**. No changes are planned.

Tuscaloosa MSA

Using the Tuscaloosa MSA 2024 population base and the design value from Table 6, zero FRM monitors are required. There is currently one FEM BAM-1022 $PM_{2.5}$ continuous monitor located at **Duncanville Middle School, AQS ID 01-125-0011**. No changes are planned.

Anniston-Oxford and Auburn-Opelika MSAs

The MSAs of Anniston-Oxford and Auburn-Opelika were evaluated to determine the need for monitors during the 5-yr network review. It was determined that due to the close proximity of $PM_{2.5}$ monitors in neighboring MSAs, additional monitors would not be needed. $PM_{2.5}$ monitoring in the adjacent MSAs continues to provide adequate coverage. Since these areas do not have design values, no FRM monitors are required by Appendix D of 40 CFR Part 58.

$PM_{2.5}$ Monitors not located in MSAs

Ashland, AQS ID 01-027-0001, serves as a regional transport site in between the large MSAs of Birmingham-Hoover, Alabama and Atlanta-Sandy Springs-Roswell, Georgia using one continuous FEM BAM-1022 $PM_{2.5}$ monitor. No changes are planned.

Crossville, **AQS ID 01-049-1003**, represents rural, background $PM_{2.5}$ values for the northeast part of the state using one continuous FEM BAM-1022 $PM_{2.5}$ monitor. No changes are planned.

Ward, Sumter Co., AQS ID 01-119-0003, represents rural, background $PM_{2.5}$ values for the state using one continuous FEM BAM-1022 $PM_{2.5}$ monitor. No changes are planned.

PM_{10} Network

PM_{10} has been a criteria pollutant since 1987. Since that time there has been widespread monitoring of the PM_{10} levels in Alabama. In 2006, the EPA modified the NAAQS for PM_{10} to revoke the annual standard. Currently, there is a daily standard of 150 ug/m3 based on 3 years of data.

The Montgomery MSA has a population between 250,000 and 500,000 and PM_{10} concentrations are less than 80% of the NAAQS daily standard. According to Table D-4 of Appendix D to Part 58, 0 to 1 PM_{10} monitors are required.

Montgomery MSA

ADEM operates two low-volume PM_{10} monitors on a 1 in 6 day schedule at **MOMS, ADEM, AQS ID 01-101-1002**, one being the collocated quality assurance monitor. No changes are planned.

Mobile MSA

ADEM set up a new PM_{10} site at James Seals Park Recreation Center, 540 Texas Street, Mobile, AQS ID 01-097-8001. This site became operational 7/1/2024. This site has two Special Purpose Monitors, the primary, a FRM 2025i monitor run on a 1 in 6 day schedule and a secondary, FEM E-BAM PLUS continuous monitor. A third monitor collects filters used for particle analysis. No changes are planned. The continuous monitor is currently undergoing repair and has not been operational since November 2024. As soon as it repaired, it will be re-installed at the site. As this is expected to be a lengthy repair, ADEM reserves the right to place a non-FEM PM_{10} monitor at the site temporarily to fill the data gap if continuous data is requested by ADEM Air Div.

Sulfur Dioxide (SO_2) Network

Effective August 23, 2010, the EPA strengthened the primary NAAQS for SO_2. The EPA established a new 1-hour standard at 75 ppb, based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. According to the EPA, for a short-term 1-hour SO_2 standard, it is more technically appropriate, efficient, and effective to use modeling as the principal means of assessing compliance for medium to larger sources, and to rely more on monitoring for groups of smaller sources and sources not as conducive to modeling. This is consistent with the EPA's historical approach and longstanding guidance for SO_2. The EPA sets specific minimum requirements that inform states on where they are required to place SO_2 monitors. The final monitoring regulations require monitors to be placed in Core Based Statistical Areas (CBSAs) based on a Population Weighted Emissions Index (PWEI) for the area. The final rule requires:

- 3 monitors in CBSAs with PWEI values ≥1,000,000 or more;
- 2 monitors in CBSAs with PWEI values <1,000,000 but >100,000; and
- 1 monitor in CBSAs with PWEI values >5,000.

According to the latest PWEI calculations listed in Table 7 only the Birmingham-Hoover MSA requires SO_2 monitoring**.** For more information regarding SO_2 monitoring in the Birmingham-Hoover MSA refer to the JCDH ambient air monitoring network plan.

ADEM operates two SO_2 monitors: Chickasaw, AQS ID 01-097-0003, for the Mobile MSA and Ward, Sumter Co., AQS ID 01-119-0003, not located in an MSA, for background purposes. ADEM is moving all monitoring from **Chickasaw, AQS ID 01-097-0003** to **Africatown, AQS ID 01-097-0023**, in 2026; Please see Appendix C for site details.

Effective September 21, 2015, the SO_2 Data Requirements Rule (DRR) per 40 CFR Part 51, requires states to report all sources that generate >2,000 tpy SO_2, not dependent upon population density. Each source in this category must characterize air quality through air quality modeling or ambient air monitoring. Sources that model must provide an annual report located in Appendix B) Each source that chooses monitoring must operate their site equivalent with the SLAMS requirements of 40 CFR Part 58. Lhoist North America of Alabama, LLC – Montevallo Plant, located within the Birmingham-Hoover MSA, has monitored SO_2 in accordance with the DRR since January 1, 2017. The site is **Lhoist, Montevallo Plant, AQS ID 01-117-9001**, and operates within ADEM's PQAO. ADEM will close this site on December 31, 2025. Please see Appendix C for justification information.

Table 7 SO_2 Minimum Monitoring Site Requirements

SO2 Population Weighted Emissions Index (PWEI) Calcuations using 2023 Census Estimates and 2020 National Emissions Inventory (NEI) v2				
CBSA Name	**2020 NEI v2 SO2 (tpy)**	**Population Est (2023)**	**PWEI in Million persons-tpy**	**Required Monitors**
Birmingham-Hoover	12,680	1,184,290	15,017	2
Mobile	4,233	411,640	1,742	0
Florence-Muscle Shoals	181	155,175	28	0
Albertville	122	100,756	12	0
Anniston-Oxford	197	116,429	23	0
Auburn-Opelika	217	201,585	44	0
Columbus, GA-AL	2,480	323,768	803	0
Cullman	81	92,016	7	0
Daphne-Fairhope-Foley	233	253,507	59	0
Decatur	398	158,635	63	0
Dothan	303	153,349	46	0
Enterprise	118	55,643	7	0
Gadsden	52	103,241	5	0
Huntsville	256	527,254	135	0
Montgomery	1,402	385,480	540	0
Ozark	94	49,871	5	0
Scottsboro	733	53,467	39	0
Selma	192	36,165	7	0
Talladega-Sylacauga	184	91,400	17	0
Troy	501	33,137	17	0
Tuscaloosa	696	278,290	194	0
LaGrange, GA-AL	242	104,821	25	0

Quality Assurance

The ADEM has an EPA-approved Quality Assurance Program Plan (QAPP) and Quality Management Plan (QMP) that details the activities used to control and document the quality of the data collected. ADEM is an independent Primary Quality Assurance Organization (PQAO) as defined by 40 CFR Part 58. Part of the EPA-required quality control program for particulate monitoring is the use of collocated particulate monitors. 40 CFR Part 58, Appendix A requires a percentage of manual particulate monitors to be collocated with FRM monitors so that quality statistics can be calculated. ADEM includes monitors for this purpose.

ADEM AAQMP Pollutant Network Tables

A description of ADEM's ambient air monitoring network, followed by detailed site evaluations, will be presented in this section.

Included will be:

- Site Common Name
- County/CBSA
- AQS ID
- Address
- Latitude and Longitude
- Monitoring Objective/Scale
- Beginning and Ending Sampling Date
- Method, Method Code and Operating Schedule
- Comparability to the NAAQS

Ozone

Site Common Name	County/CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective / Scale	Type	Date Began	Date Ended	Method, Method Code and Schedule	NAAQS
Fairhope	Baldwin/Daphne-Fairhope-Foley MSA	01-003-0010	Fairhope High School, Fairhope	30.497478	-87.880258	Population Exposure/ Neighborhood	SLAMS	3/1/2000	active	U, 087, C	Y
Wetumpka Westside Technology Park	Elmore/Montgomery MSA	01-051-0004	3148 Elmore Road, Wetumpka	32.53568	-86.255193	Highest Concentration/ Urban	SLAMS	3/1/2018	active	U, 087, C	Y
Gadsden Community College	Etowah/Gadsden MSA	01-055-0010	1001 Wallace Drive, Gadsden	33.991494	-85.992647	Population Exposure/ Urban	SLAMS	3/6/2024	active	U, 087, C	Y
Chickasaw	Mobile/Mobile MSA	01-097-0003	Iroquois and Azalea Chickasaw	30.770181	-88.087761	Population Exposure/ Neighborhood	SLAMS	3/2/1982	Est. 10/31/2025	U, 087, C	Y
Africatown	Mobile/Mobile MSA	01-097-0023	528 Capt Leon C Roberts St, Prichard	30.736264	-88.072292	Population Exposure/ Neighborhood	SLAMS	Est. 1/1/2026		U, 087, C	
Bay Road	Mobile/Mobile MSA	01-097-2005	Bay Road, Mobile	30.474305	-88.141022	Population Exposure and Highest Concentration/ Urban	SLAMS	3/1/1999	active	U, 087, C	Y
MOMS, ADEM	Montgomery/ Montgomery MSA	01-101-1002	1350 Coliseum Blvd, Montgomery	32.412811	-86.263394	Population Exposure/ Neighborhood	SLAMS	6/2/1993	active	U, 087, C	Y
Decatur	Morgan/Decatur MSA	01-103-0011	Wallace Development Center, Decatur	34.530717	-86.967536	Population Exposure/ Urban	SLAMS	4/1/2000	active	U, 087, C	Y
Phenix City - S. Girard School	Russell/Columbus GA-AL MSA	01-113-0003	510 6th Place South, Phenix City	32.437028	-84.999653	Highest Concentration/ Urban	SLAMS	3/1/2018	active	U, 087, C	Y
Helena	Shelby/Birmingham-Hoover MSA	01-117-0004	Bearden Farm. Helena	33.317142	-86.825754	Population Exposure/ Urban	SLAMS	1/1/1983	active	U, 087, C	Y
Ward, Sumter Co.	Sumter/no MSA	01-119-0003	NNE of Ward Post Office	32.362606	-88.277992	General/Background/ Regional	SLAMS	3/1/2013	active	U, 087, C	Y
Duncanville Middle School	Tuscaloosa/Tuscaloosa MSA	01-125-0011	11205 Eagle Pkwy, Duncanville	33.095379	-87.481501	Population Exposure/ Urban	SLAMS	3/1/2022	active	U, 087, C	Y
U = UV Photometric Ozone Analyzer; C = Continuous											

$PM_{2.5}$

Site Common Name	County/CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective/Scale	Type	Date Began	Date Ended	Method, Method Code and Schedule	NAAQS
Fairhope	Baldwin/Daphne-Fairhope-Foley MSA	01-003-0010	Fairhope High School, Fairhope	30.497478	-87.880258	Population Exposure/ Neighborhood	SLAMS	1/1/2000	12/31/2022	L, 145, 3	Y
								1/1/2023	active	B, 209, C	Y
Ashland	Clay/no MSA	01-027-0001	Ashland Airport, Ashland	33.284928	-85.803608	Regional Transport/ Regional	SLAMS	1/1/1999	12/31/2022	L, 145, 3	Y
								1/1/2023	active	B, 209, C	Y
Crossville	DeKalb/no MSA	01-049-1003	13112 Hwy 68, Crossville	34.288567	-85.969858	General/Background/ Neighborhood	SLAMS	1/1/1999	12/31/2022	L, 145, 3	Y
								1/1/2023	active	B, 209, C	Y
Gadsden C College	Etowah/ Gadsden MSA	01-055-0010	1001 Wallace Drive, Gadsden	33.991494	-85.992647	Population Exposure/ Urban	SLAMS	1/1/2000	12/6/2021	L, 145, 3	Y
								12/7/2021	active	B, 209, C	Y
Chickasaw	Mobile/Mobile MSA	01-097-0003	Iroquois and Azalea, Chickasaw	30.770181	-88.087761	Population Exposure/ Regional	SLAMS	7/19/2002	12/31/2022	L, 145, 3	Y
								1/1/2023	Est. 12/31/2025	B, 209, C	Y
Africatown	Mobile/Mobile MSA	01-097-0023	528 Capt Leon C Roberts St, Prichard	30.736264	-88.072292	Population Exposure/ Neighborhood	SLAMS	Est 1/1/2026			
MOMS, ADEM	Montgomery/ Montgomery MSA	01-101-0002	1350 Coliseum Blvd, Montgomery	32.412811	-86.263394	Population Exposure/ Neighborhood	SLAMS	1/16/2009	2/13/2022	L, 145, 3	Y
								2/14/2023	active	B, 209, C	Y
								1/16/2009	active	L, 145, 3	Y
Decatur	Morgan/Decatur MSA	01-103-0011	Wallace Ctr.Hwy 31, Decatur	34.530717	-86.967536	Population Exposure/ Middle	SLAMS	8/7/2001	1/31/2023	L, 145, 3	Y
								2/1/2023	active	B, 209, C	Y
Phenix City - S. Girard School	Russell/Columbus GA-AL MSA	01-113-0003	510 6th Place South, Phenix City	32.437028	-84.999653	Highest Concentration/ Urban	SLAMS	9/18/2017	2/16/2023	B, 209, C	Y
								2/17/2023	active	L, 145, 3	Y
								1/18/2017	active	L, 145, 6	Y
Ward, Sumter Co.	Sumter/no MSA	01-119-0003	NNE of Ward Post Office, Ward	32.362606	-88.277992	General/Background/ Regional	SLAMS	1/1/2021	active	B, 209, C	Y
Duncanville Middle School	Tuscaloosa/ Tuscaloosa MSA	01-125-0011	11205 Eagle Pkwy, Duncanville	33.095379	-87.481501	Population Exposure/ Urban	SLAMS	1/1/2023	active	B, 209, C	Y

B = Beta Attenuation Monitor; L = Low Volume Sequential Sampler; 3 = 24 hours every 3rd day; 6 = 24 hours every 6th day; C = Continuous

PM_{10}

Site Common Name	County / CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective / Scale	Type	Date Began	Date Ended	Method, Method Code and Schedule	NAAQS
MOMS, ADEM	Montgomery / Montgomery MSA	01-101-1002	1350 Coliseum Blvd, Montgomery	32.412811	-86.263394	Population Exposure/ Neighborhood	SLAMS	9/16/1993	active	L, 127, 6	Y
						Quality Assurance/ Neighborhood	SLAMS	1/1/2013	active	L, 127, 6	Y
Seals Park	Mobile/Mobile MSA	01-097-8001	540 Texas St, Mobile, AL 36603	30.679499	-88.04658	Population Exposure/ Neighborhood	SPM	7/1/2023	active	L, 127, 6	N
								7/1/2023	active	B, 226, C	N

L = Low Volume Sequential Sampler; B = Beta Attenuation Monitor; 3= 24 hours every 3rd day; 6 = 24 hours every 6th day; C= continuous

SO_2

Site Common Name	County / CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective / Scale	Type	Date Began	Date Ended	Method, Method Code and Schedule	NAAQS
Chickasaw	Mobile / Mobile MSA	01-097-0003	Iroquois And Azalea, Chickasaw	30.76972	-88.0875	Population Exposure / Neighborhood	SLAMS	1/1/2013	active	P, 100, C	Y
Lhoist	Shelby / Birmingham-Hoover MSA	01-117-9001	7444 St. Hwy 25, Calera	33.0928	-86.8072	High Concentration – SO2 DRR / Middle	SLAMS	1/1/2017	active	P, 100, C	Y
Ward	Sumter / no MSA	01-119-0003	NNE of Ward Post Office, Ward	32.362606	-88.277992	General/Background / Regional	SLAMS	1/1/2018	active	P, 100, C	Y

P = Pulsed Fluorescent C = Continuous

Lead

Site Common Name	County/CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective / Scale	Type	Date Began	Date Ended	Method, Method Code and Schedule	NAAQS
Troy Lead	Pike/Troy µSA	01-109-0003	Henderson Road, Troy	31.790479	-85.978974	Highest Concentration / Neighborhood	SLAMS	1/1/1979	active	I, 813, 6	Y
								1/1/1979	active	I, 813, 6	Y
I=Inductively Coupled Plasma Mass Spectroscopy 6 = 24 hours every 6th day											

NO2

Site Common Name	County / CBSA	AQS ID	Address	Latitude	Longitude	Monitoring Objective / Scale	Type	Beginning Date	Date Ended	Method, Method Code and Schedule	NAAQS
Ward	Sumter / no MSA	01-119-0003	NNE of Ward Post Office, Ward	32.362606	-88.277992	General/Background / Regional	SLAMS	Est. 7/1/2025		CAP, 256, C	Y[1]
CAP = Cavity Attenuated Phase Shift C = Continuous											
1=NAAQS exclusion flag will be applied to the 1st 24 months of data											

Appendix A

Site Assessments

All of ADEM's sites were evaluated for compliance and were found to meet the requirements of 40 CFR 58, Appendices A, C, D and E, as appropriate.

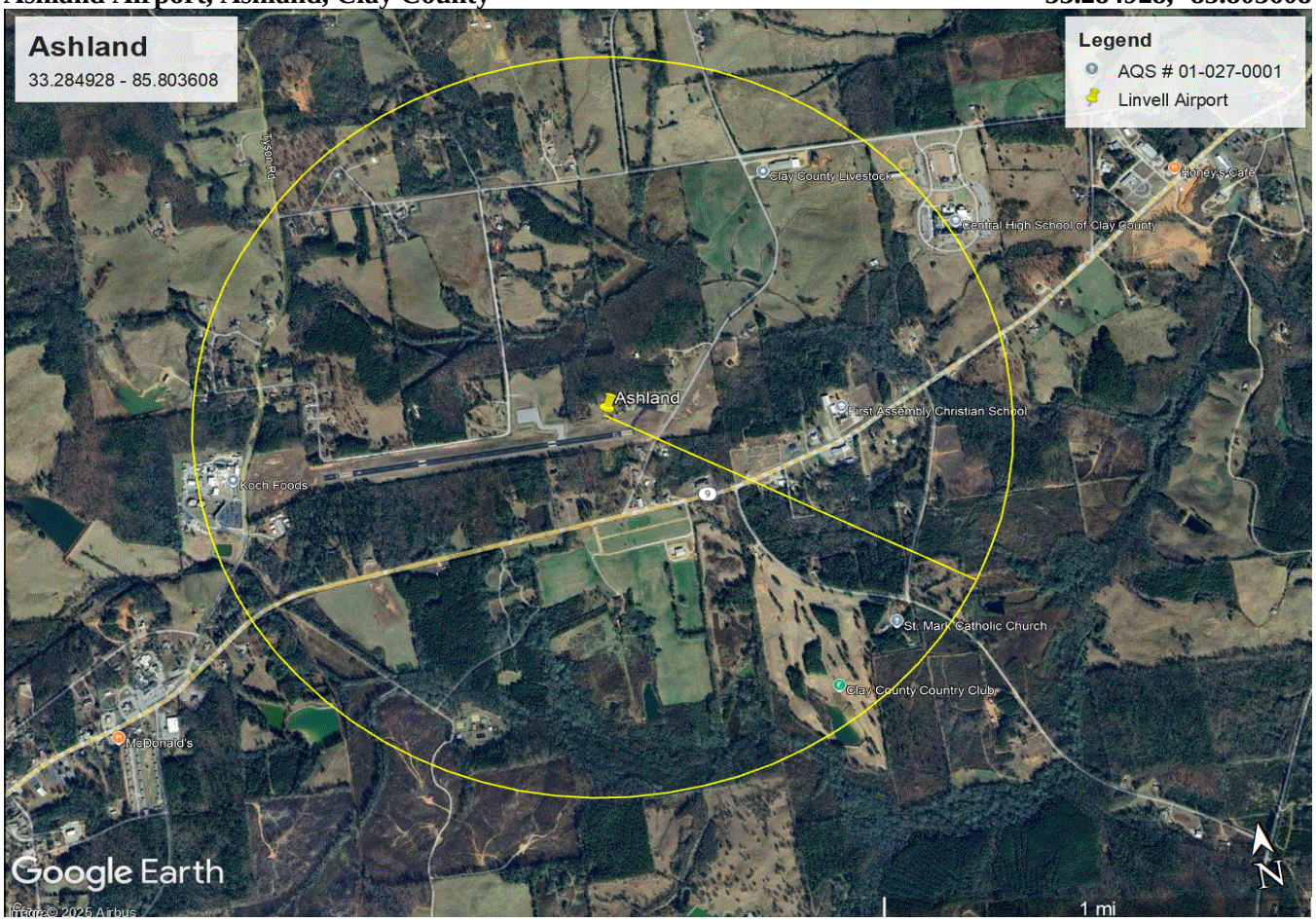
The following issues were observed during site evaluations and any corrective actions noted.

Table 8 Issues observed during site assessments

Site	Issue	Correction
Troy AQS ID 01-109-0003	Closest tree dripline was 11 m from the air inlet.	Tree was trimmed after last evaluation, but it has regrown. This large tree will need to be delimbed soon.

ASHLAND — AQS ID 01-027-0001

Ashland Airport, Ashland, Clay County — **33.284928, -85.803608**



MSA: N/A 227.01 m to Air Port Road — Property Type: Residential (private)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
$PM_{2.5}$	Regional Transport/ Regional	Continuous	12/20/2022	209	Inlet Head	2.0 m	N/A	6.4 m	2.3 m South

This site meets all requirements of 40 CFR Part 58. Evaluation Date: 05/13/2025

CHICKASAW
801 Iroquois St., Chickasaw, Mobile County

AQS ID 01-097-0003
30.770181, -88.087761

MSA: Mobile 58.9 m from Iroquois St Property Type: Commercial (city)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/ Neighborhood	Continuous	03/02/1982	087	Teflon/ Teflon	4.3m	1.2 m	12.8 m	4.4 m Southwest
SO_2			01/01/2013	100	Teflon/ Teflon	4.8m	1.7 m	15.2 m	
$PM_{2.5}$	Population Exposure/ Regional	Continuous	01/01/2015	209	Inlet Head	2.0 m	2.1 m	7.9 m	

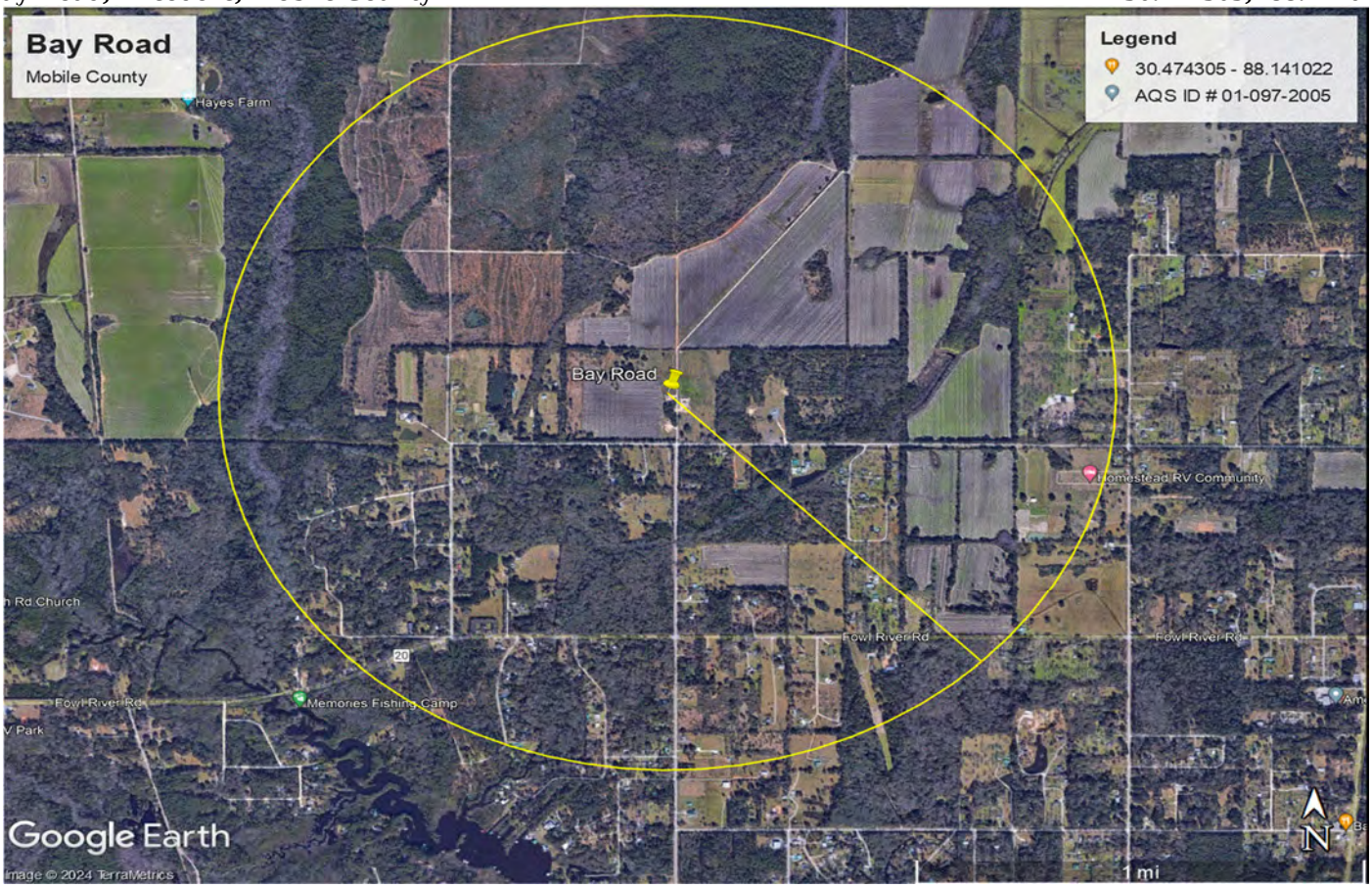
This site meets all requirements of 40 CFR Part 58 Evaluation Date: 03/12/2025

BAY ROAD

AQS ID 01-097-2005

Bay Road, Theodore, Mobile County

30.474305, -88.141022



MSA: Mobile 68.5 m to Bay Road Property Type: Agricultural (county)

NORTH

SOUTH

EAST

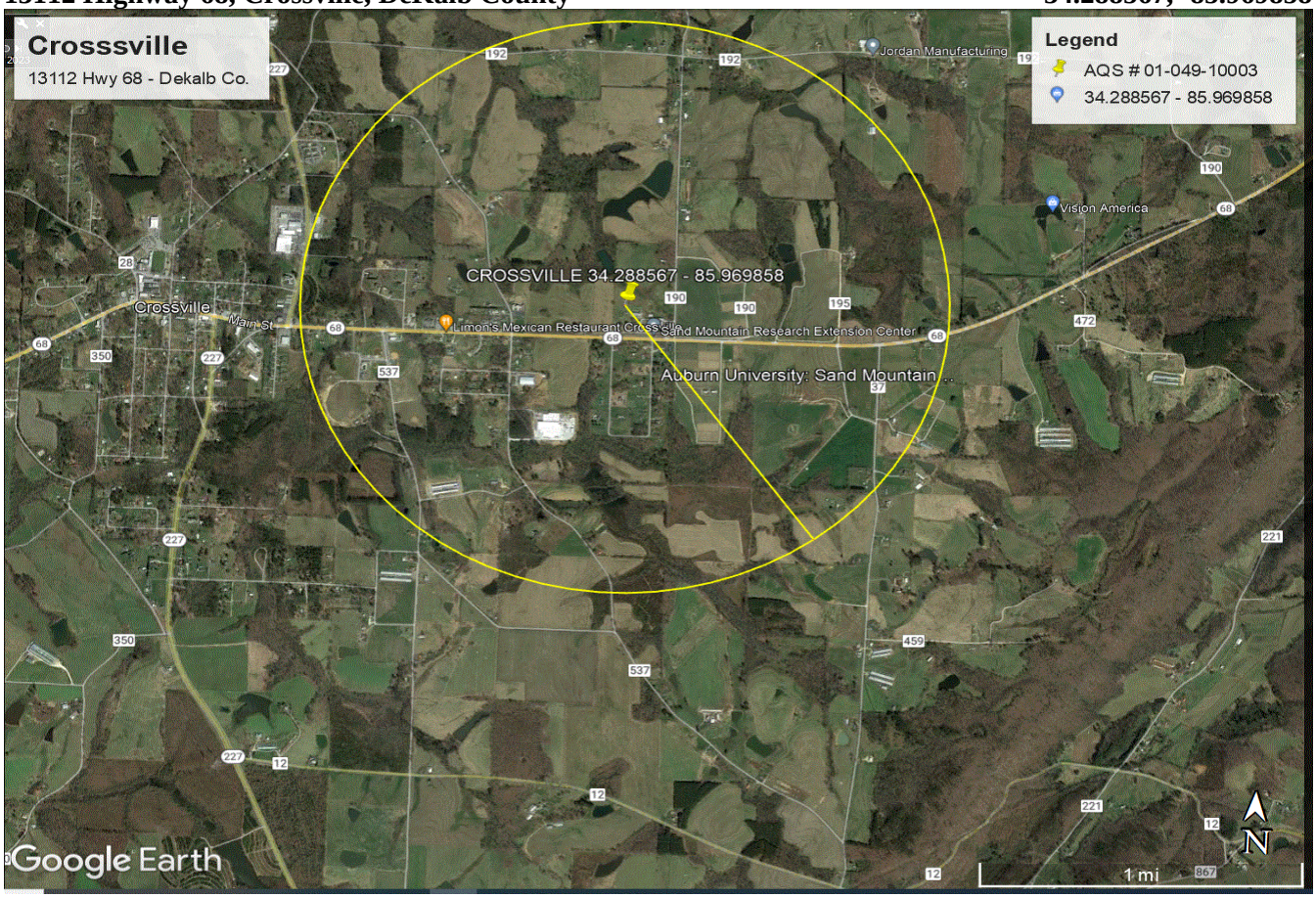
WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure and Highest Concentration/ Urban	Continuous	03/01/1999	087	Teflon	4.4m	1.2m	34.4 m	14.8 m South

This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/11/2025

CROSSVILLE — AQS ID 01-049-1003

13112 Highway 68, Crossville, DeKalb County — **34.288567, -85.969858**



USA: Fort Payne 172.2 m from Hwy 68 — Property Type: Agricultural

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
$PM_{2.5}$	General Background/ Neighborhood	Continuous	10/01/2002	209	Inlet Head	2.0 m	N/A	22.9 m	9.8 m East

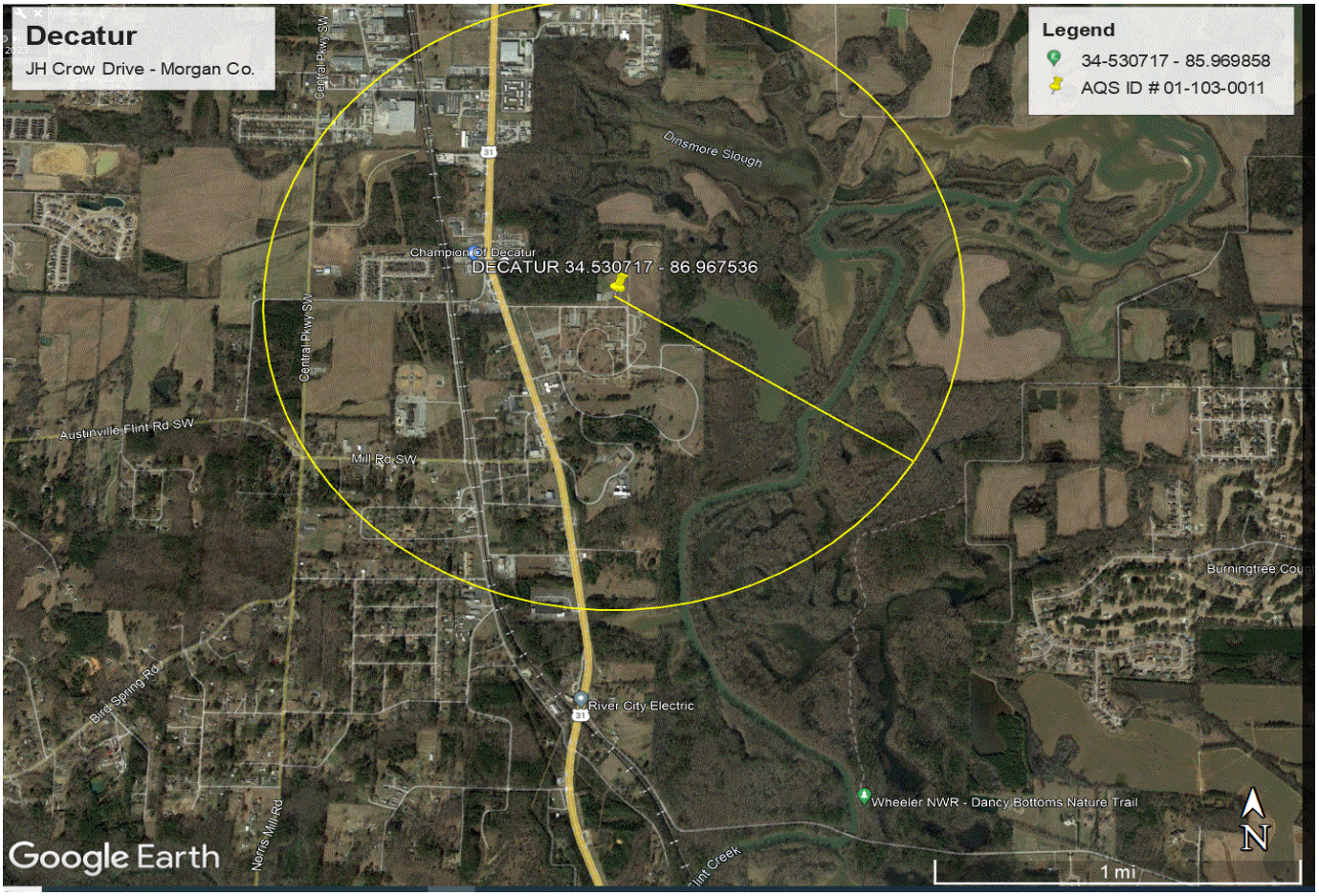
This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/19/2025

DECATUR

JH Crow Drive, Decatur, Morgan County

AQS ID 01-103-0011

34.530717, -86.967536



MSA: Decatur 507.37 m to Hwy 31

Property Type: Commercial

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/Urban	Continuous	04/01/2000	087	Teflon/ Teflon	4.3 m	1.7 m	22.3m	15.8 m Southwest
$PM_{2.5}$	Population Exposure/Middle	Continuous	1/23/2023	209	Inlet Head	4.6 m	2.1 m	23.8 m	

This site meets all requirements of 40 CFR Part 58.

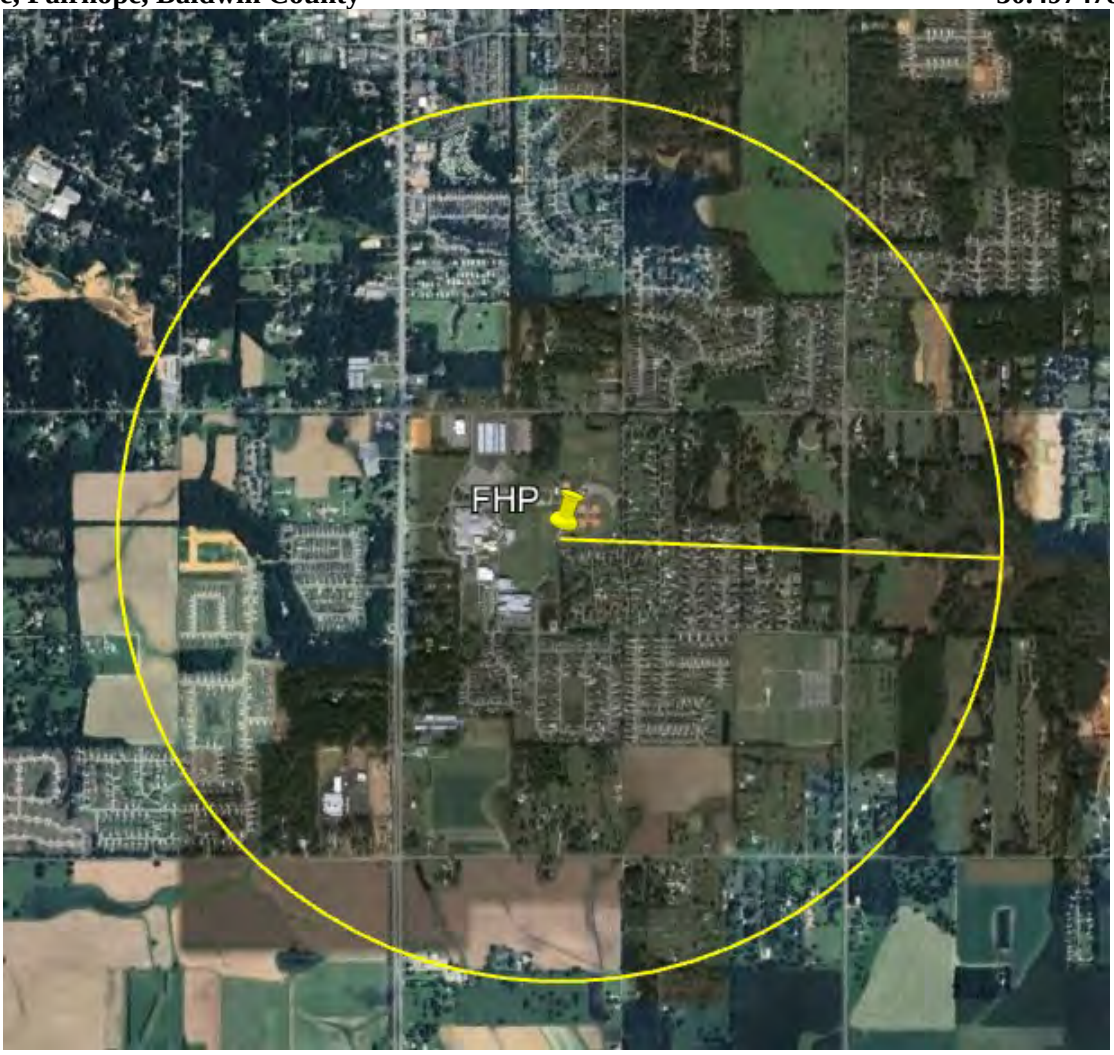
Evaluation Date: 05/07/2025

FAIRHOPE

AQS ID 01-003-0010

1 Pirate Drive, Fairhope, Baldwin County

30.497478, -87.880258



MSA: Daphne-Fairhope-Foley 549.7 m from Pirate Drive Property Type: Commercial (county)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/ Neighborhood	Continuous	03/01/2000	087	Teflon	4.4 m	1.8 m	21.9 m	7.2 m North East
$PM_{2.5}$		Continuous	01/26/2023	209	Inlet Head	2.0 m	N/A	21.3 m	

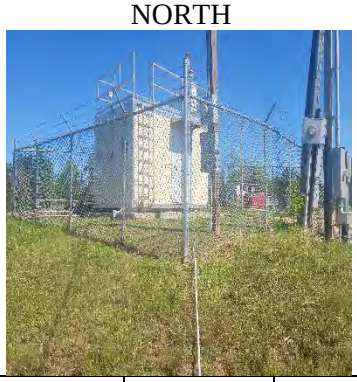
This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/12/2025

DUNCANVILLE MIDDLE SCHOOL — AQS ID 01-125-0011

Duncanville, Tuscaloosa County — **33.095379, -87.481507**

MSA: Duncanville/Tuscaloosa — Property Type: Commercial

NORTH



SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure	Continuous	03/02/2022	087	Teflon	4.4 m	1.6m	> 50m	N/A
$PM_{2.5}$	Population Exposure	Continuous	12/8/2022	209	Inlet	4.7 m	2.0 m	> 50m	N/A

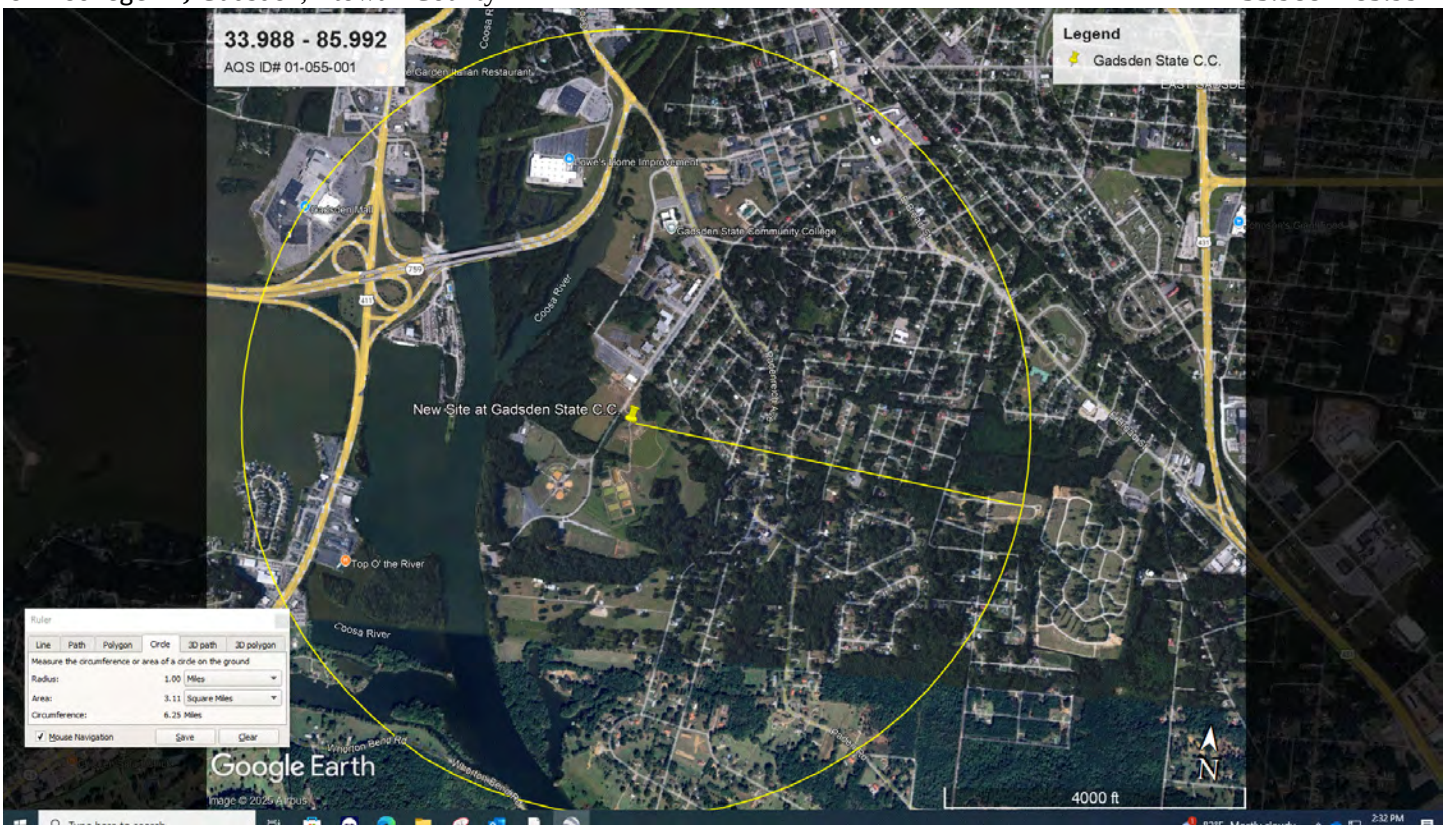
This site meets all requirements of 40 CFR Part 58. — Evaluation Date: 04/11/2025

GADSDEN C COLLEGE

AQS ID 01-055-001

314 College Dr, Gadsden, Etowah County

33.988 - 85.992



MSA: Decatur 507.37 m to Hwy 31 USCB 123,668 (July 1, 2021 Census) Property Type: Commercial

NORTH

SOUTH

EAST

WEST

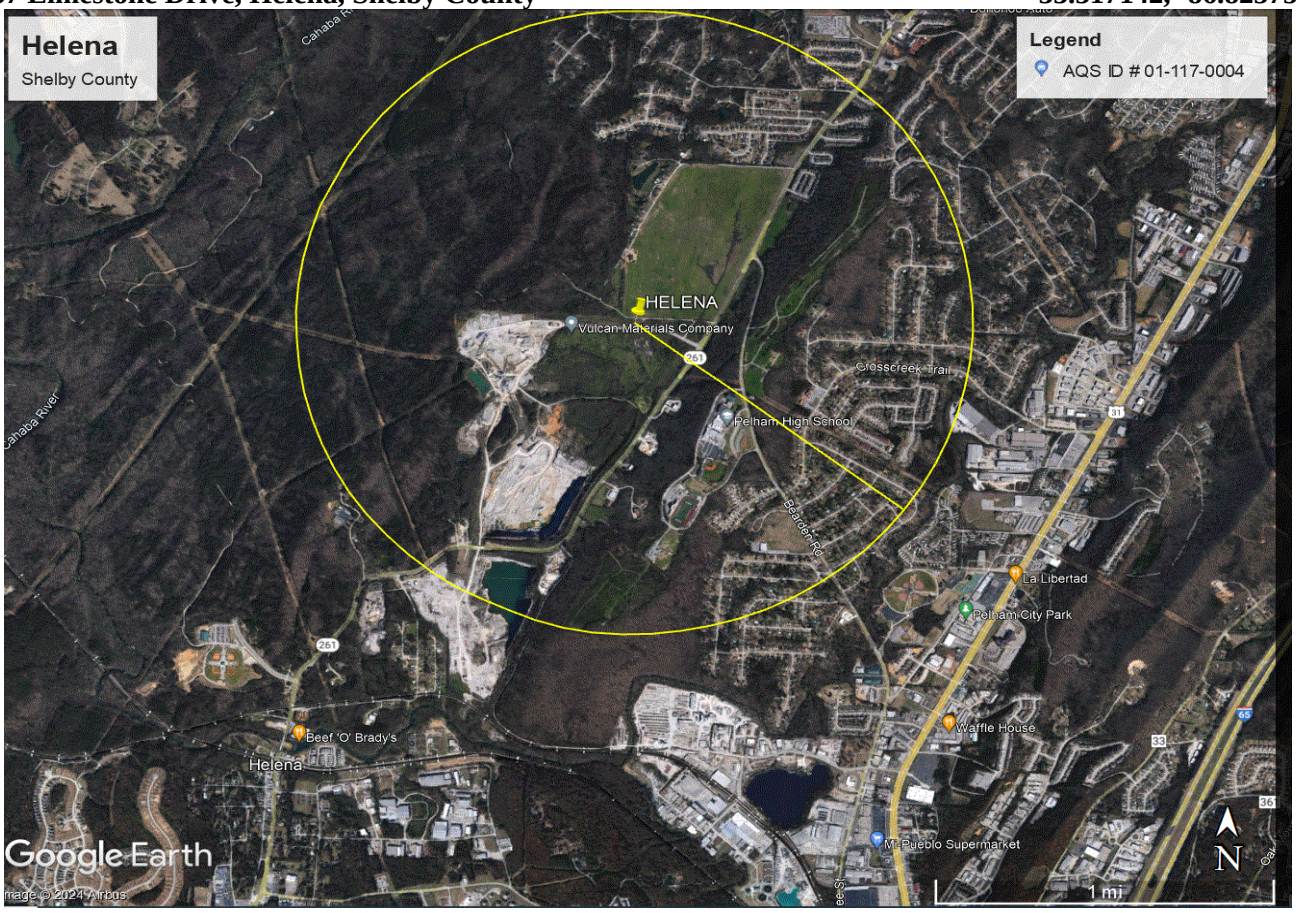
Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/Urban	Continuous	03/07/2024	087	Teflon	4.83 m	1.83 m	54.8 m	56.2 m South
$PM_{2.5}$		Continuous	12/08/2021	209	Metal Inlet	4.57 m	2.08 m	56.3 m	

This site meets all requirements of 40 CFR Part 58

Evaluation Date: 05/06/2025

HELENA **AQS ID 01-117-0004**

237 Limestone Drive, Helena, Shelby County **33.317142, -86.825754**



MSA: Birmingham-Hoover 33.5m to Limestone Drive Property Type: Agricultural (private)

NORTH SOUTH EAST WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/ Urban	Continuous	01/01/1983	087	Teflon	4.4 m	1.6 m	16.2 m	13 m North

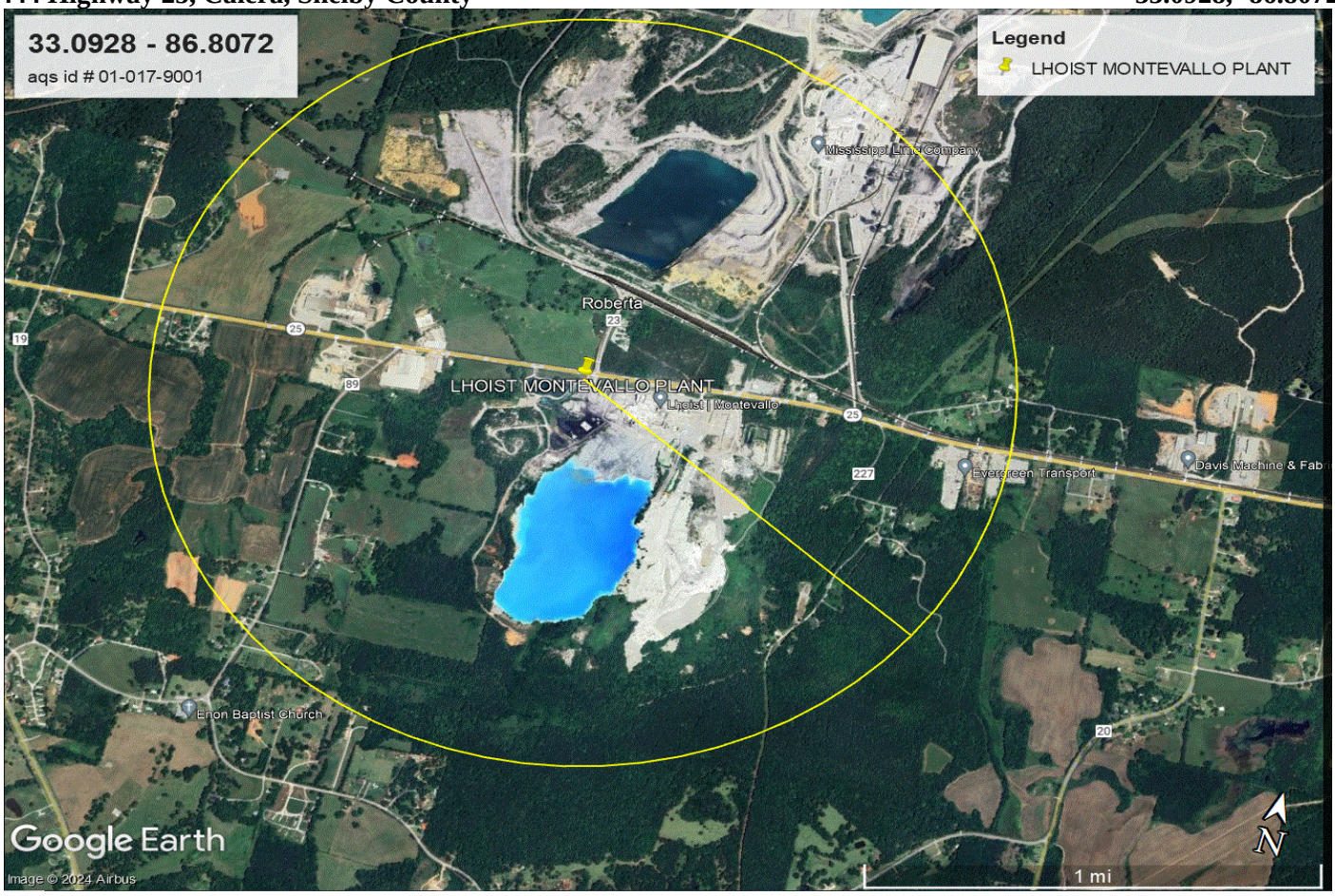
This site meets all requirements of 40 CFR Part 58. Evaluation Date: 02/24/2025

LHOIST, MONTEVALLO PLANT

AQS ID 01-017-9001

7444 Highway 25, Calera, Shelby County

33.0928, -86.8072



MSA: Birmingham-Hoover 22 m from Hwy 25

Property Type: Industrial (private)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
SO_2	Highest Concentration/ Middle	Continuous	01/01/2017	100	Teflon	3.9 m	1.5 m	12.5 m	2.6 m Southwest

This site meets all requirements of 40 CFR Part 58.

Evaluation Date: 04/24/25

MOMS, ADEM **AQS ID 01-101-1002**

1350 Coliseum Boulevard, Montgomery, Montgomery County **32.412811, -86.263394**

MSA: Montgomery 285.75 m to Coliseum Boulevard Property Type: Commercial (state)

NORTH SOUTH EAST WEST




Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance between collocated samplers	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/ Neighborhood	Continuous	06/02/1993	087	Teflon	4.3 m	1.8 m	N/A	68.2 m	10.m - West
$PM_{2.5}$			01/01/2015	209	Inlet Head	4.7 m	2.1 m	1.1 m	69.8 m	
$PM_{2.5}$ CO		1/3 days	01/16/2009	145		4.6 m	2.1 m	1.1m	68.2 m	
PM_{10}		1/6 days	09/16/1993	127		3.2 m	2.0 m	1.3 m	58.8 m	
PM_{10} CO			01/01/2013			3.2 m	2.0 m	1.3 m	58.5m	

This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/20/2025

PHENIX CITY-SOUTH GIRARD SCHOOL — AQS ID 01-113-0003

510 6th Place South, Phenix City, Russell County — **32.437028, -84.999653**

MSA: Columbus GA-AL 108.24 m to 6th Place South Property Type: Commercial (city)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method	Probe/Rain /Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance between collocated samplers	Distance from probe to nearest tree dripline	Height nearest tree/ Direction
Ozone	Highest Concentration	Continous	3/1/18	087	Teflon	4.5 m	1.8 m	N/A	48.8 m	9.8 m S
$PM_{2.5}$	Highest Concentration	1/3 day	1/31/23	145	Inlet	4.7 m	2.0 m	1.3 m	45.4 m	
$PM_{2.5}$ CO	Highest Concentration	1/6 day	1/18/17	145	Inlet	4.7 m	2.0 m	1.3 m	46.8 m	
SASS	Pop. Expo	1/6 day	6/12/17	811	Inlet	4.3 m	1.6 m	N/A	44.8 m	
URG	Pop. Expo	1/6 day	6/12/17	812	Inlet	4.7m	2.0 m	N/A	45.2 m	

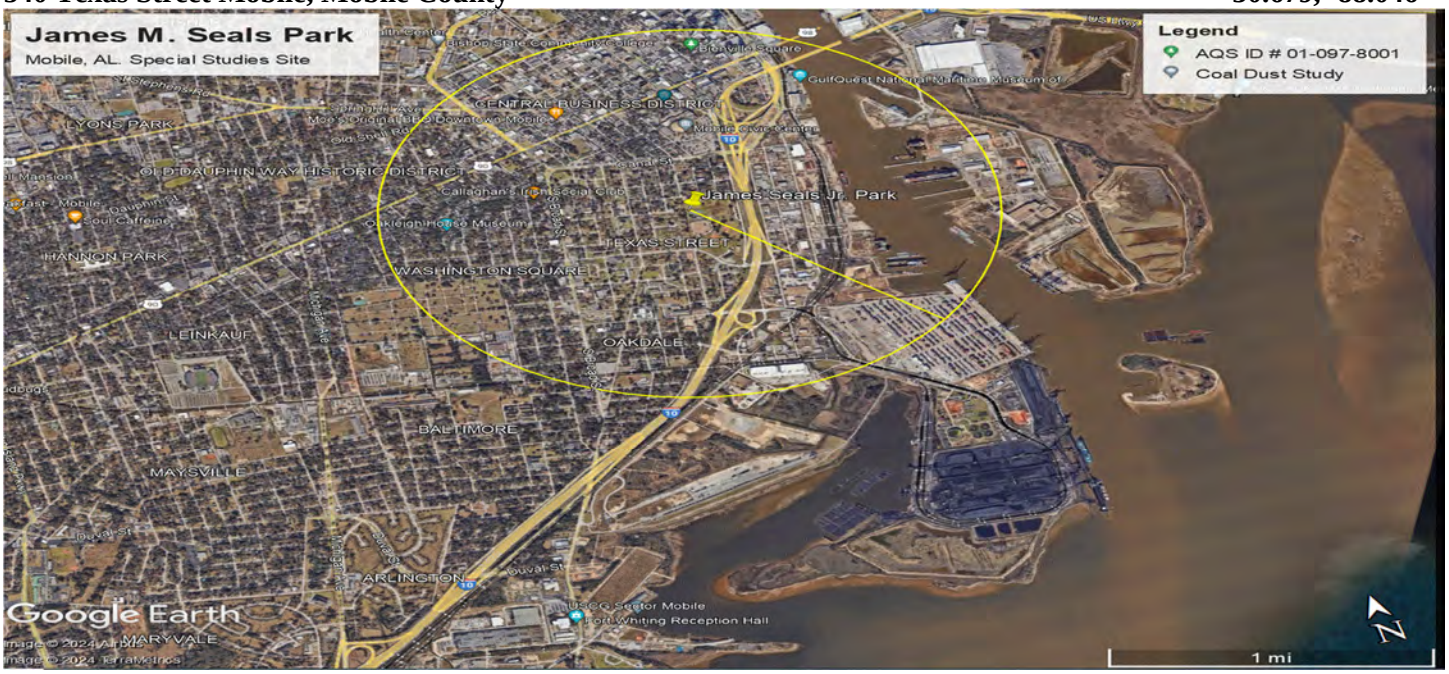
This site meets all requirements of 40 CFR Part 58. Evaluation Date: 02/27/2025

SEALS PARK

AQS ID 01-097-8001

540 Texas Street Mobile, Mobile County

30.679, -88.046



MSA: Mobile

Property Type: City Park

NORTH

SOUTH

EAST

WEST

Parameter/ Monitor Type	Monitoring Objective / Scale	Schedule	Start Dates	AQS Method Code	Probe/ Rain Shield Material	Monitor Inlet Height from ground.	Distance from Inlet to supporting Structure	Distance from inlet to nearest tree dripline	Height of nearest tree & direction from inlet
PM_{10}	Source-Oriented/ Neighborhood	1/6 day	07/01/2023	127	Inlet	N/A	N/A	18.0 m	18.0 m West
PM_{10}		Continuous		226				15.2 m	
Mini- Vol/ SPM		1/6 day		N/A					

This site meets all requirements of 40 CFR Part 58.

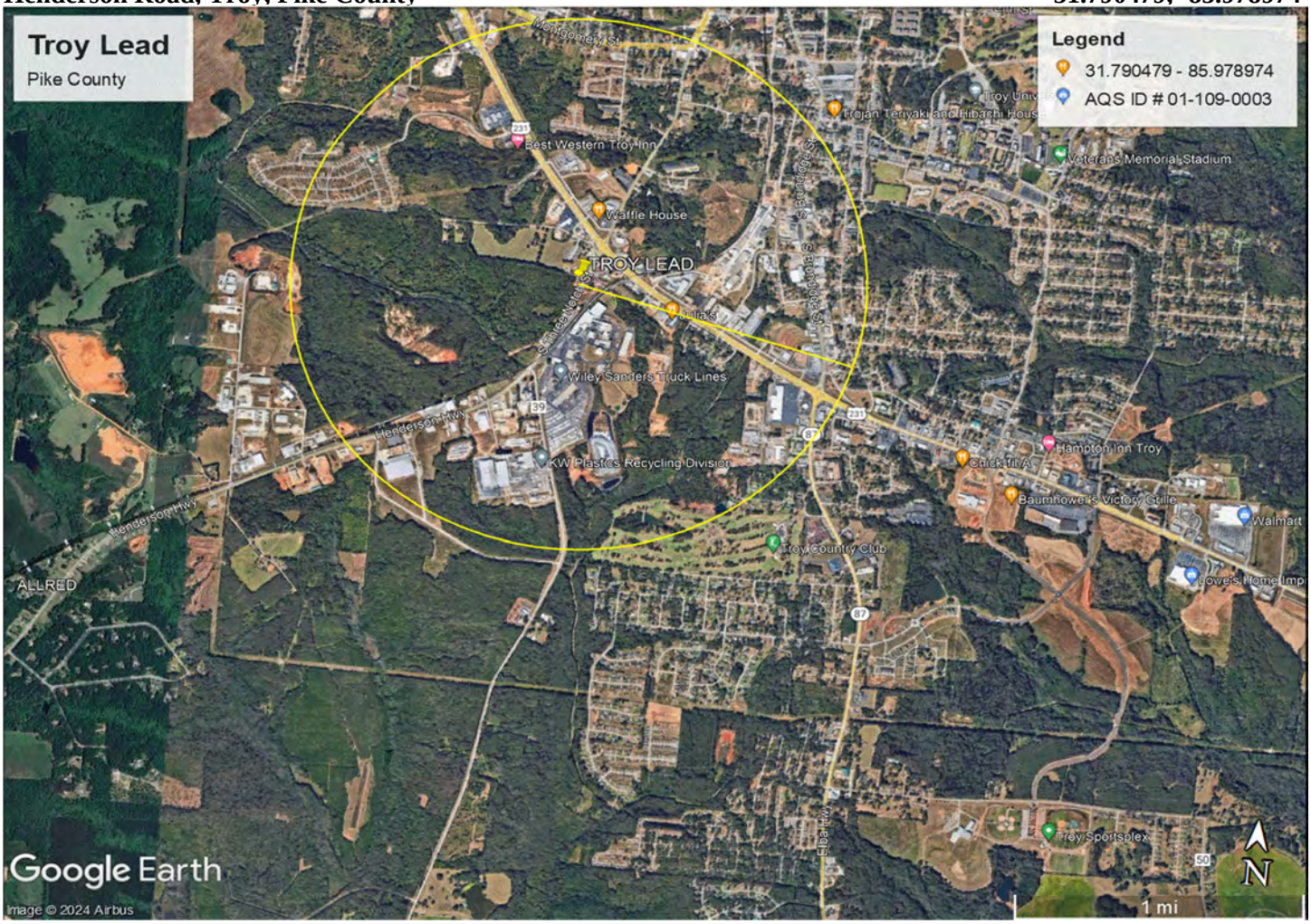
Evaluation Date: 03/11/2025

TROY

AQS ID 01-109-0003

Henderson Road, Troy, Pike County

31.790479, -85.978974



USA: Troy 15.2 m Henderson Road

Property Type: Industrial (private)

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe Inlet Height from ground	Distance between collocated samplers	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Lead	Highest Concentration/ Neighborhood	1/6 days	01/01/2009	813	2.1 m	2.0 m	14.6 m	14.8 & 13.4m North
Lead CO					2.1 m	2.0 m	11.0 m	14.8 & 13.4 m North

This site meets all requirements of 40 CFR Part 58.

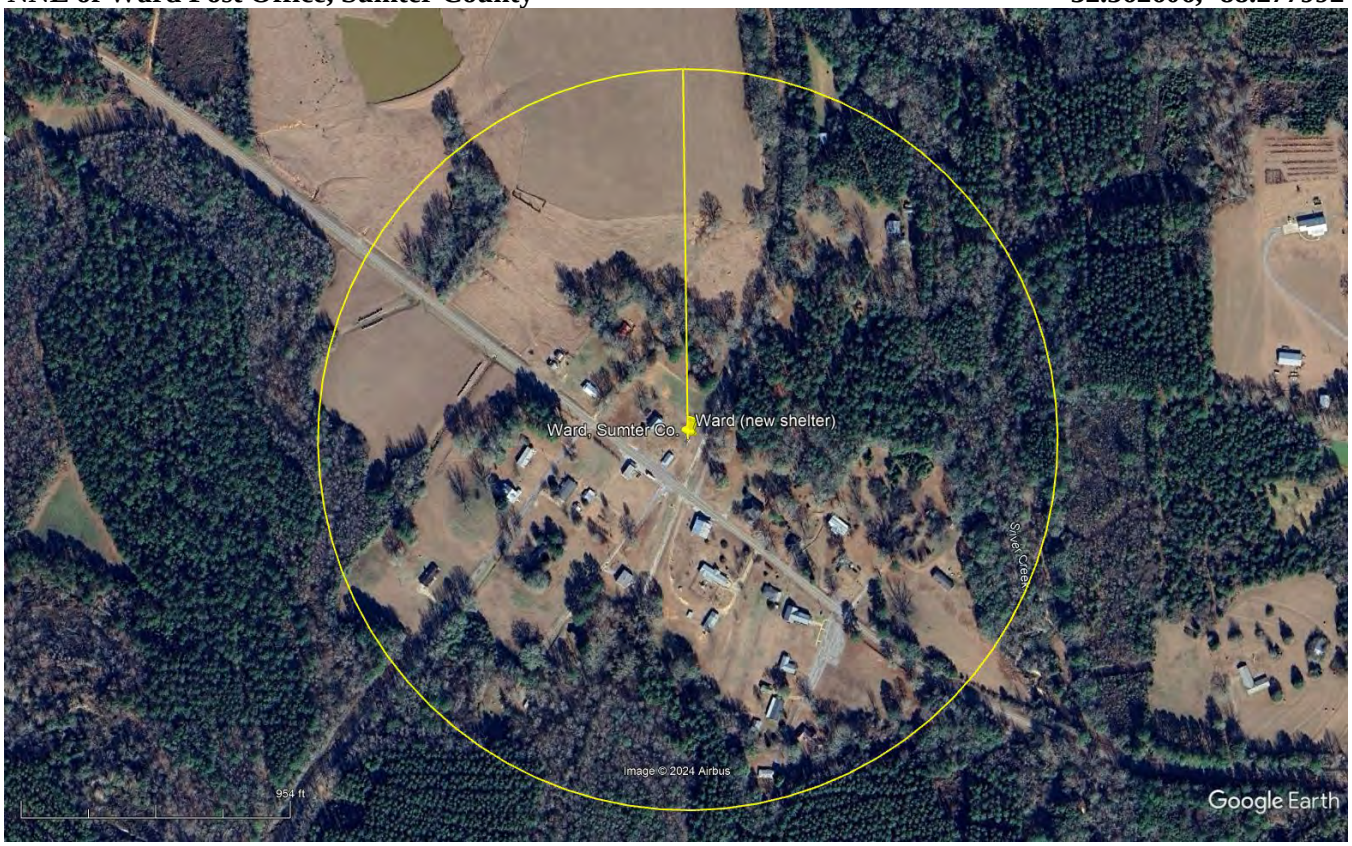
Evaluation Date: 04/24/2025

WARD

NNE of Ward Post Office, Sumter County

AQS ID 01-119-0003

32.362606, -88.277992



MSA: N/A | 44.8 m to County Rd. 10 | Property Type: Agricultural

NORTH

SOUTH

EAST

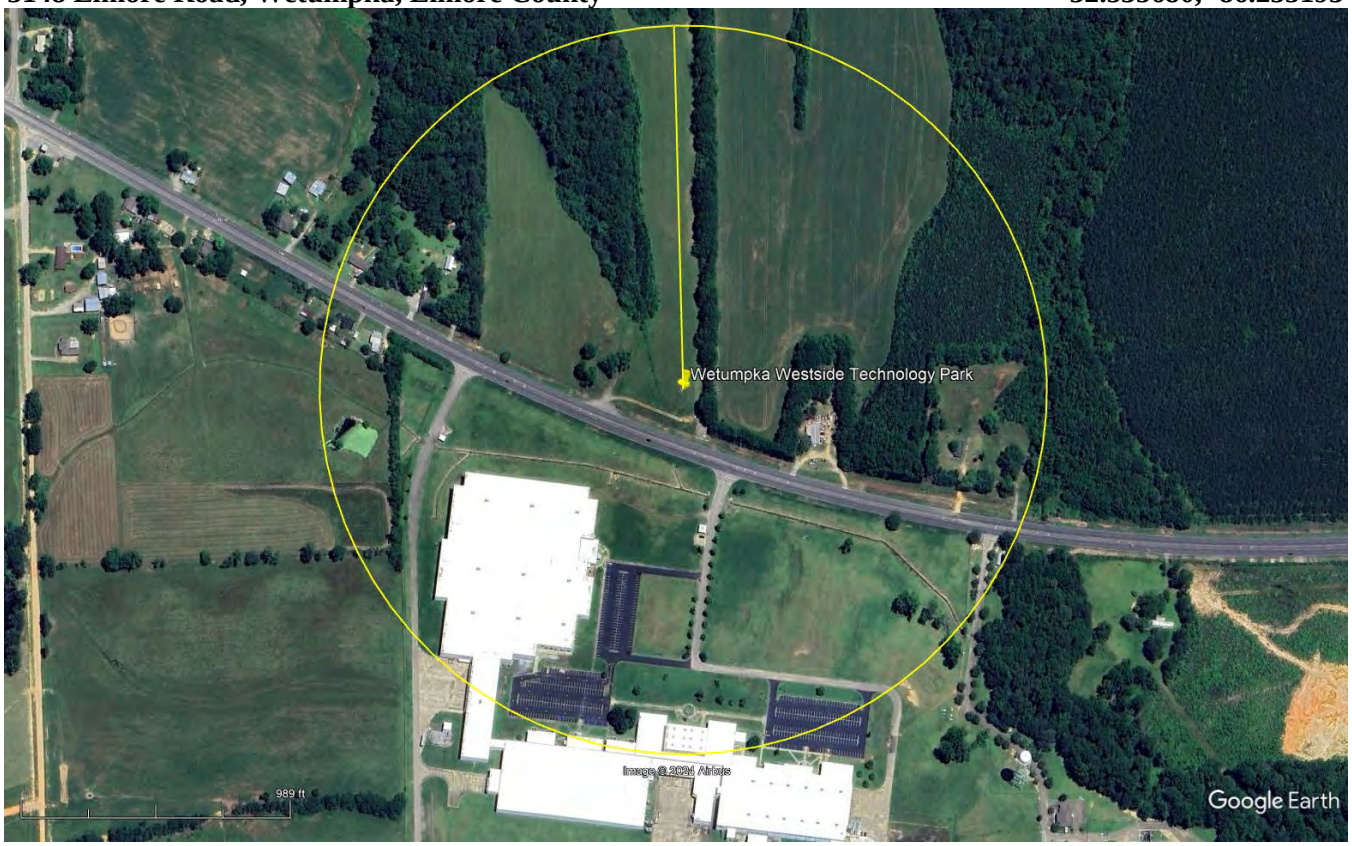
WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
$PM_{2.5}$	General Background/ Regional	Continuous	01/01/2021	209	Inlet Head	4.7 m	2.1 m	29.4 m	15.0 m S.E.
Ozone			03/01/2013	087	Teflon	4.6 m	1.9 m	29.6 m	
SO_2			01/04/2018	100		4.6 m	1.9 m	27.7 m	
NO_2			Est 7/1/2025	256					

This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/28/2025

WETUMPKA WESTSIDE TECHNOLOGY PARK — AQS ID 01-051-0004

3148 Elmore Road, Wetumpka, Elmore County — **32.535680, -86.255193**



MSA: Montgomery — 56m to Hwy 14 — Property Type: Industrial

NORTH

SOUTH

EAST

WEST

Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Highest Concentration/ Urban	Continuous	03/20/2018	087	Teflon	4.0 m	1.4 m	20.7 m	5.8 m East

This site meets all requirements of 40 CFR Part 58. Evaluation Date: 03/20/2025

Appendix B

DRR SO_2 Annual Report

The Alabama Department of Environmental Management (ADEM) submits this annual assessment pursuant to the United States Environmental Protection Agency's (EPA) Data Requirements Rule (DRR) for the 2010 1-hour Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standard (NAAQS). Specifically, Title 40 of the Code of Federal Regulation (CFR), Part 51.1205(b) states, "For any area where modeling of actual SO_2 emissions serve[s] as the basis for designating such area as attainment for the 2010 SO_2 NAAQS, the air agency shall submit an annual report to the EPA Regional Administrator by July 1 of each year…. that is available for public inspection, that documents the annual SO2 emissions of each applicable source in each such area and provides an assessment of the cause of any emissions increase from the previous year." This report satisfies this requirement.

Table B-1: Alabama SO_2 DRR Sources

Facility No.	Plant Name
201-0001	International Paper Company- Prattville Mill

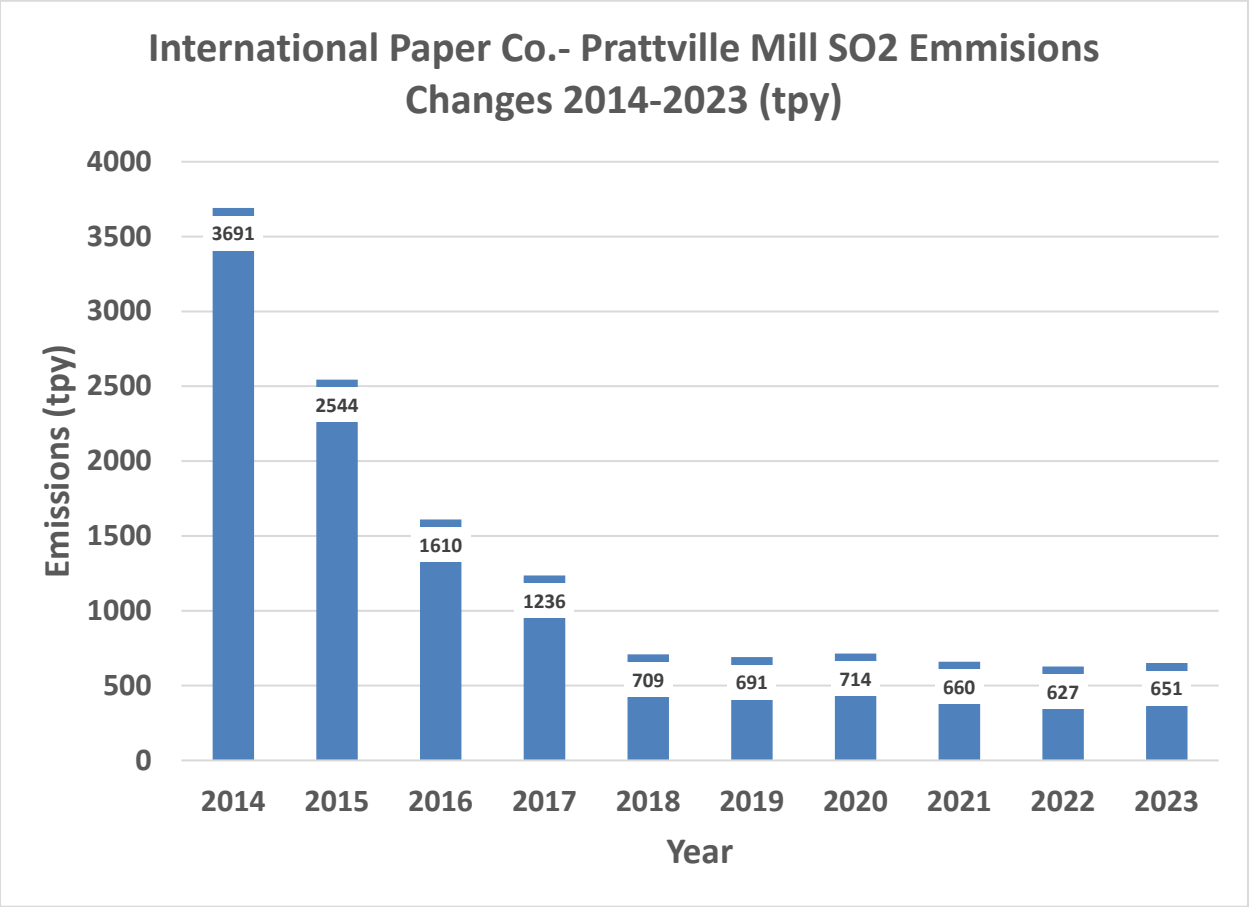
International Paper Company- Prattville Mill

For this review, actual emissions from the last ten Title V reporting periods were compared (2014-2023) to assess possible increases in SO_2 emissions. This data is presented both graphically and in table form below. (Table B-2 and Figure B-1, respectively). Between the base year of 2014 and 2023, the International Paper- Prattville facility showed an overall decrease in SO_2 emissions.

Table B-2: International Paper Co- Prattville Mill SO_2 Emissions (2014-2023)

Facility No.	Plant Name	Year	SO_2 Emissions (tpy)
201-0001	International Paper-Prattville Mill	2014	3691
		2015	2544
		2016	1610
		2017	1236
		2018	709
		2019	691
		2020	714
		2021	660
		2022	627
		2023	651

Figure B-1: International Paper- Prattville Mill SO_2 Emissions 2014- 2023



Based on the analysis of 2023 emissions compared to earlier emissions, which were the basis of the modeled emissions, it is reasonable to conclude that no additional modeling is necessary for International Paper- Prattville. The existing modeling was approved by EPA in its attainment/unclassifiable determination for Autauga County and can still be relied on to demonstrate that the 1-hour SO_2 NAAQS continues to be met in this area.

Appendix C
Site Change Justifications

Closure of Lhoist Site (01-117-9001)

The Lhoist, Montevallo Plant, AQS ID 01-117-9001, operates within the Metropolitan Statistical Area (MSA) of Birmingham-Hoover. The site began operations in 2017 as required by the Data Requirements Rule (DRR). When the site did not meet the DRR closure requirements within the first two 3-yr data cycles, it continued operations as a SLAMS monitor as part of the AAQMP.

40 CFR 58.14 (c) has certain conditions that need to be met when closing a SLAMS site. These conditions are summarized below.

40 CFR 58.14 (c) approval conditions:

1. Parameter in attainment for the last 5 years
2. The monitor not required by attainment plan or maintenance plan
3. The monitor is not the last monitor in a non-attainment area
4. There is less than 10% probability that the monitor will exceed the NAAQS during the next 3 years.

According to the DRR, monitoring should continue until the site meets the closure requirements for a SLAMS site. The current 2024 SO_2 design value is 54 ppb (99th percentile of 1-hour daily maximum concentrations, averaged over 3 years) which is less than 85% of the NAAQS (75 ppb) and now meets the statistical requirements for closure under 40 CFR 58.14(c). ADEM will shut down the SO_2 monitor at the end of calendar year 2025 due to meeting the requirements of 40 CFR 58.14 (c).

A statistical test was applied to the design values for the monitor to determine if the data met condition 4. The design values and the analysis are shown below. If the formula below is less than 80 percent of the applicable NAAQS the site is eligible for closure.

For Lhoist

3-year DV		**annual**
	2020	62
	2021	55
	2022	45
	2023	51
	2024	53
Average Design Value		53
stdev		6.2
Probability (A)		**58.9**
NAAQS		75
80% of NAAQS (B)		**60.0**
Is A <B		**YES**

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

Where:
$\overline{X}$ = avg design value for past 5 years
t = student's t value for n-1 deg of freedom
s = standard deviation of the design values
n = number of records
NAAQS = pollutant Standard

ADEM will close this site on 12/31/2025 for the following reasons.

- Meets all applicable conditions of 40 CFR 58.14 (c).
- Monitor design value is <80% of the NAAQS
- Statistical analysis show the site has less than a 10% chance that the monitor will exceed the NAAQS during the next 3 years.
- This monitor is not required as part of ADEM's ambient monitoring network and has fulfilled the DRR directive.

Relocation of Chickasaw (01-097-0003) to Africatown (01-097-0023)

ADEM plans to relocate the Chickasaw O_3, $PM_{2.5}$, and SO_2 monitoring site (AQS ID: 01-097-0003) to a new site in Africatown (AQS ID: 01-097-0023). This site relocation is in response to public comments that ADEM received on the 2023 and 2024 Network Plans requesting an air monitoring site in Africatown and raising environmental justice concerns in the community. The EPA provided funding to ADEM under an IRA Air Monitoring Grant to support this site relocation.

ADEM began efforts to find a site in the fall of 2024. All suitable sites were presented to EPA and Africatown representatives on January 17, 2025. As a result of the meeting and subsequent discussion, a second reconnaissance of the area was conducted in March 2025 focusing on two areas: the vicinity of the Africatown Hall and the Whiteley Elementary School, both were areas of interest to the Africatown representatives.

Site Selection Process

ADEM began the site selection process by conducting a google map search of the area, focusing on available open space and publicly owned properties (Figure C-1).

Figure C-1 Africatown Recon Sites

Each site was visited, photographed and evaluated for monitoring site potential. The information was compiled and presented to the EPA and selected representatives of Africatown at their bi-weekly meeting on January 17, 2025. After the presentation and discussion, it was decided that ADEM needed to revisit two of the potential sites: Whitley Elementary School and Africatown Hall (Figure C-2). These two areas were favorable to the Africatown representatives but previously eliminated by ADEM due to proximity to historical Africatown.

Figure C-2 Final Recon and Distance from CHK

The Africatown Hall property is located next to a very busy road with lots of truck traffic and adjacent to a gravel lot which creates a lot of dust. The school site is located within a neighborhood with open space and no tall trees.

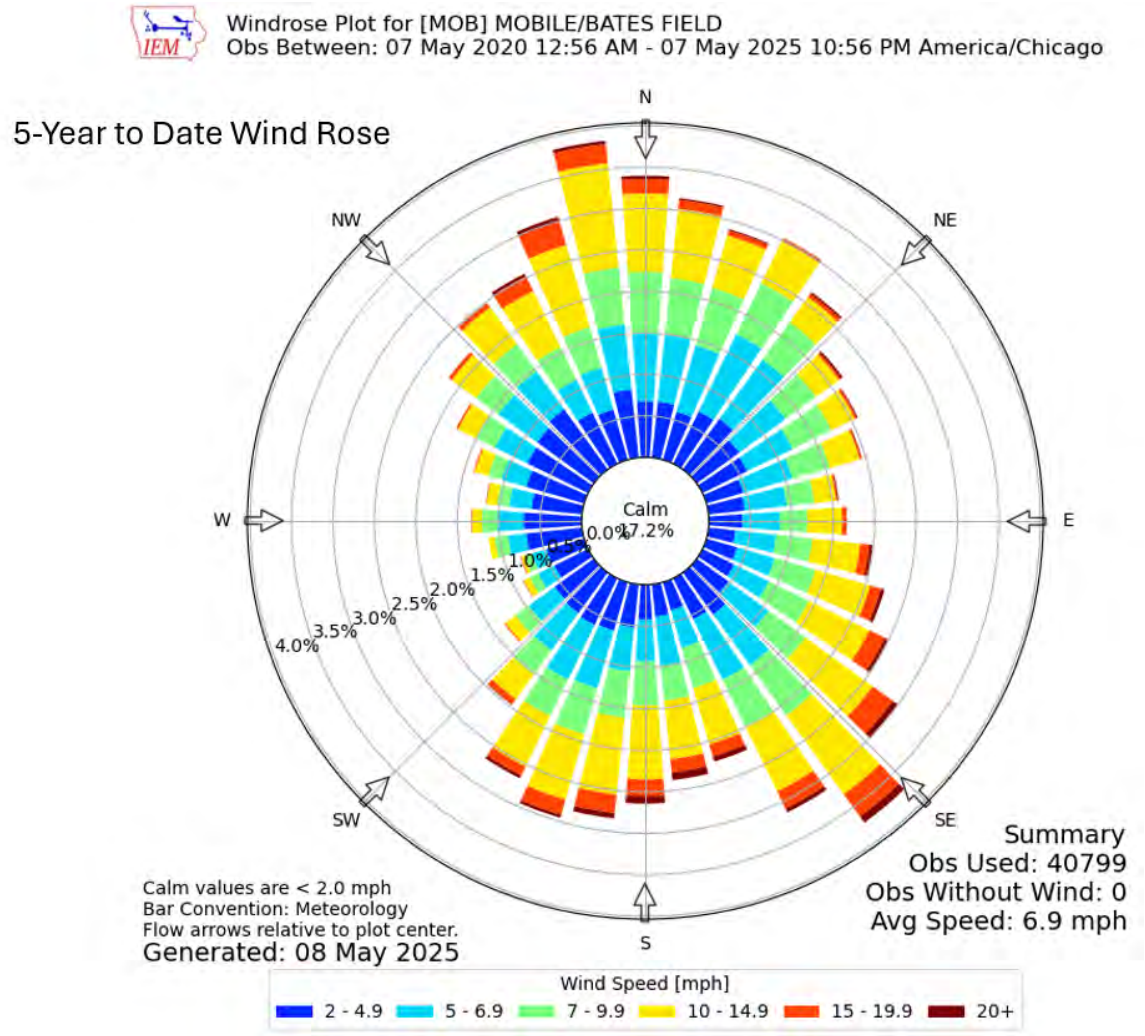


Figure C-3 Wind Rose of the Chickasaw Area

Final Site Selected

After an extensive search and numerous site visits, the Africatown ambient air monitoring station will be established at the Whitley Elementary School as the representative site for the Mobile MSA. The site is located on county-owned property adjacent to an elementary school. The terrain surrounding the area is relatively flat and located within a neighborhood. The selected site is 2.4 miles south-southeast of the Chickasaw site and concentrations are expected to be similar to the existing site. Windrose show predominant wind will be out of the North or Southeast (Figure C-3). Close up views of the site can be found in Figures C-4 and C-5. Efforts are underway to acquire the necessary permissions to begin construction from the Mobile County School Board. ADEM has also submitted the paperwork required to purchase the shelter.

Figure C-4 Close-up of land use around the proposed site.

Table C-1. Site Information

Station	Latitude (Decimal degrees)	Longitude (Decimal degrees)	Elevation (feet)	Scale
Africatown (AFK)	30.736264°	-88.072292°	10	Neighborhood

Figure C-5 Close-Up Google Earth Image Showing Approximate Location of Africatown Monitoring Station.

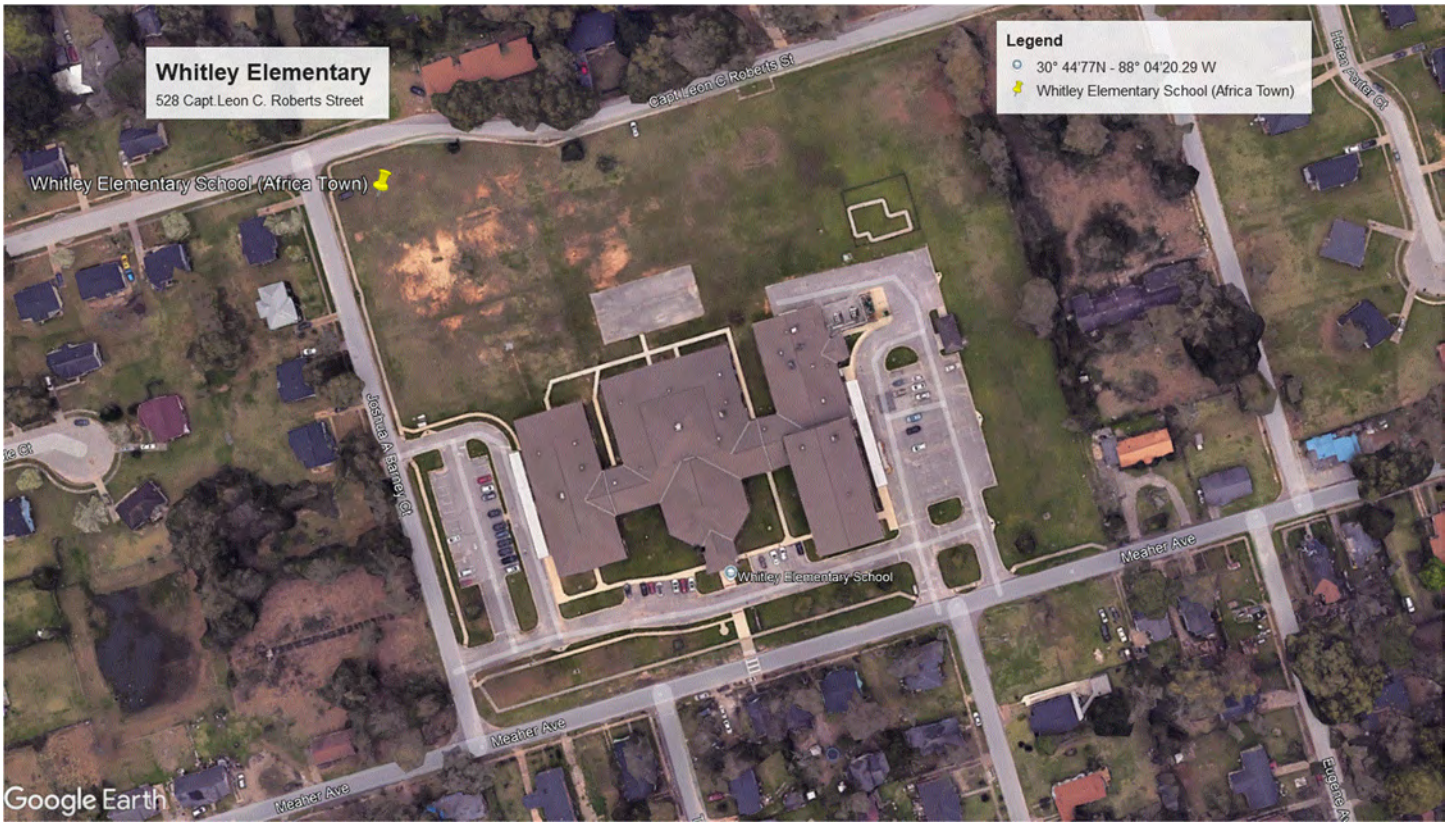
Based upon the monitoring objective and the site location, the data collected at the Africatown site will be population-oriented representativeness on a neighborhood scale. Neighborhood scale defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometer range. It is appropriate for measurements intending to represent highest concentrations, population-oriented impacts, and impacts from sources.

The new monitoring site will begin collecting data as soon as construction is complete. Sampling is anticipated to start no later than January 1, 2026. Although the Africatown site is replacing Chickasaw, the Chickasaw site will remain operational until the end of 2025 to complete a full year of ambient air data. A full Africatown site assessment will be conducted after the site is completely operational and published within the 2026/2027 Annual Network Plan next year. A preliminary site assessment is included on the next page.

To continue ambient air monitoring in the Mobile MSA, the site will operate two continuous gaseous monitors, to collect ozone and SO_2 concentrations and a FEM continuous particulate monitor to collect hourly $PM_{2.5}$ concentrations which will be reported to AirNow. ADEM requests the data from Chickasaw and Africatown to be linked in AQS to show a continuous trend for the MSA.

Africatown - **AQS ID 01-097-0023**

528 Capt Leon C Roberts St, Prichard, AL 36610 **30.736264, -88.072292**



MSA: Mobile Property Type: Commercial (city)

NORTH SOUTH EAST WEST




Parameter	Monitoring Objective/ Scale	Schedule	Start Date	AQS Method Code	Probe/Rain Shield Material	Probe Inlet Height from ground	Distance from probe to supporting structure	Distance from probe to nearest tree dripline	Height of nearest tree/ Direction from probe to tree
Ozone	Population Exposure/ Neighborhood	Continuous	Est. 01/01/2026	087	Teflon	TBD	TBD	TBD	TBD
SO2				100		TBD	TBD	TBD	
$PM_{2.5}$				209	Inlet Head	TBD	TBD	TBD	

Evaluation Date: 03/11/2025

Appendix D
Comments

The following table contains changes made to the plan after the public comment period.

Page	Change