



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Protection Branch
Ambient Monitoring Program

Addendum to 2023 Ambient Air Monitoring Plan

Per the Environmental Protection Agency regulations, the Georgia Ambient Air Monitoring Program (GA AAMP) produces an annual network monitoring plan to show how the ambient air monitoring requirements are met (40 CFR 58.10). If that plan is modified during the year after it is published, it is the state's responsibility to let the public know of those modifications. Since the publication of the *2023 Ambient Air Monitoring Plan* in June 2023, the GA AAMP is in the process of making the following changes to the ambient air monitoring network. For more information regarding the *2023 Ambient Air Monitoring Plan*, refer to the GA AAMP website at <https://airgeorgia.org/networkplans.html>.

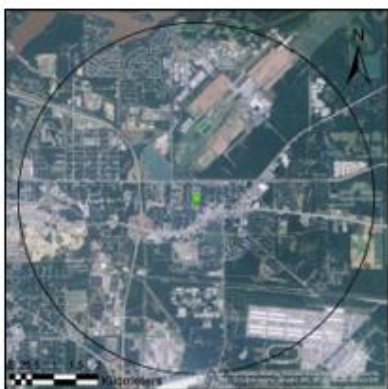
For the following site changes, GA AAMP worked closely with EPA Region 4 to find a suitable monitoring location for the ambient air monitoring equipment. Obstructions, monitoring path and fetch, distances from roadways, power availability, and access for staff are all considered when considering the feasibility of a potential site. All GA AAMP sites must be selected such that the requirements of 40 CFR 58 Appendix E are met upon the site being commissioned. This addendum will cover a correction to the spatial scale for the ambient air monitoring equipment at the Albany site's (13-095-0007) current location, the ambient air monitoring equipment being relocated at the Albany site, and a waiver for the siting requirements of the new ambient air monitoring location at the Albany site. In addition, this addendum will cover GA AAMP's plan to change parameter and method codes in EPA's Air Quality System (AQS) for the PM_{2.5} Teledyne T640(x)s at the Columbus-Airport site (13-215-0008), Augusta site (13-245-0091), and Albany site (13-095-0007), and GA AAMP's plan to install PM_{2.5} Teledyne T640(x)s with the new data alignment feature at the Columbus-Baker (13-215-0012), Forest Park (13-063-0091), Kennesaw (13-067-0003) and Macon Allied (13-021-0007) sites, which will be reflected with the Special Purpose Monitor (SPM) designation and be evaluated for up to two years.

Reclassification of Spatial Scale for Albany’s Monitors

In accordance with 40 CFR 58.10 regarding modifications to the *2023 Ambient Air Monitoring Plan*, the GA AAMP provides the following documentation in support of reclassifying the Albany ambient air monitoring site (13-095-0007). Due to the distance from the nearest street, the current site location as described in the *2023 Ambient Air Monitoring Plan* needs to be corrected from a neighborhood spatial scale to reflect an urban spatial scale. Please see the spatial scale reclassification in the following detailed site information. The first set of site details below lists the information as it was shown in the original *2023 Ambient Air Monitoring Plan*. The next set of site details shows the correction of the spatial scale.

Original site details:

Albany



AQS ID: 130950007

Address: Turner Elementary School, 2001 Leonard Avenue, Albany, Dougherty County, Georgia 31705

Site Established: 7/31/91

Latitude/Longitude: N31.5776/W-84.0998

Elevation: 67 meters

Area Represented: Albany MSA Site

History: Established as TSP site

North

South

East

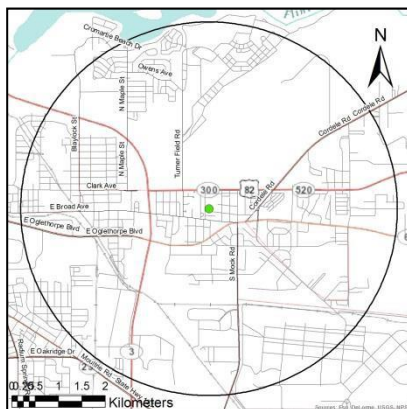
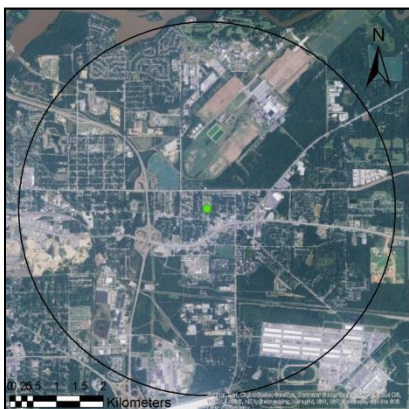
West



Parameter	Monitoring Objective	Sampling Schedule	Probe Inlet Height	Spatial Scale	Begin Date
PM _{2.5}	Population Exposure	Daily	2.1 m	Neighborhood	2/2/99
PM _{2.5}	Quality Assurance	Every 3 days	2.1 m	Neighborhood	1/10/13
PM _{2.5}	Population Exposure	Continuous	2.1 m	Neighborhood	5/11/08

New site details:

Albany



AQS ID: 130950007

Address: Turner Elementary School, 2001 Leonard Avenue, Albany, Dougherty County, Georgia 31705

Site Established: 7/31/91

Latitude/Longitude: N31.5776/W-84.0998

Elevation: 67 meters

Area Represented: Albany MSA Site

History: Established as TSP site

North

South

East

West

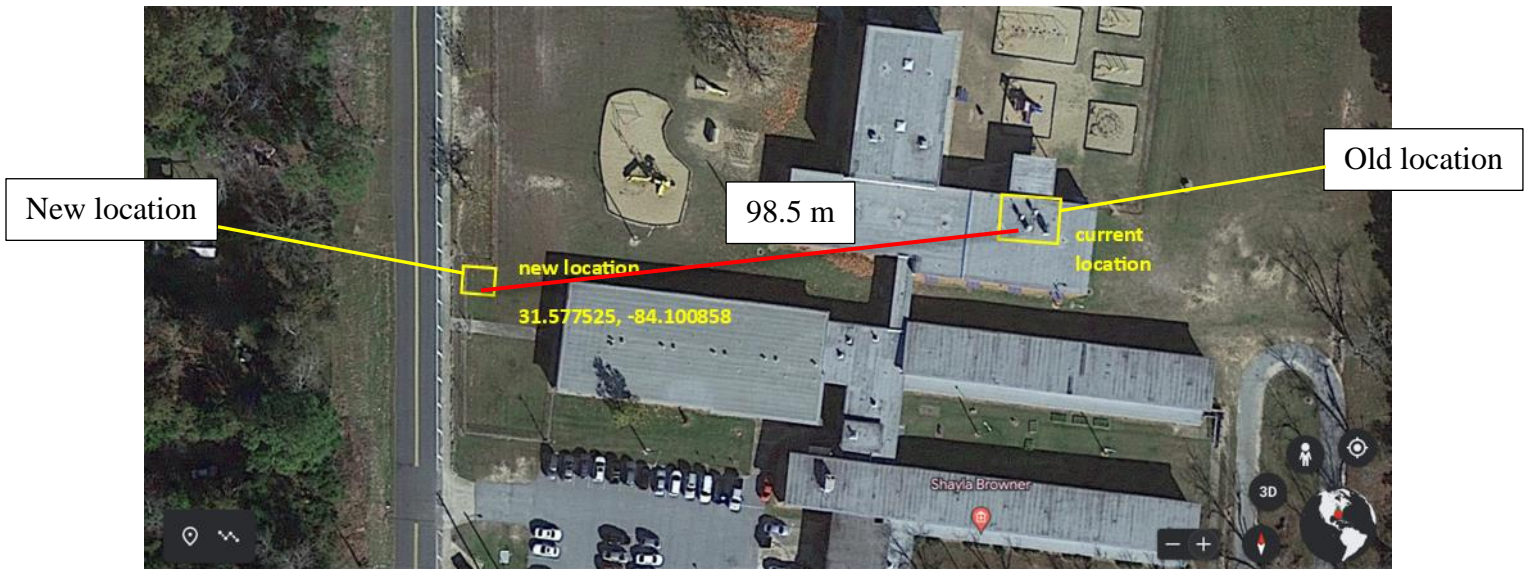


Parameter	Monitoring Objective	Sampling Schedule	Probe Inlet Height	Spatial Scale	Begin Date
PM _{2.5}	Population Exposure	Daily	2.1 m	Urban	2/2/99
PM _{2.5}	Quality Assurance	Every 3 days	2.1 m	Urban	1/10/13
PM _{2.5}	Population Exposure	Continuous	2.1 m	Urban	5/11/08

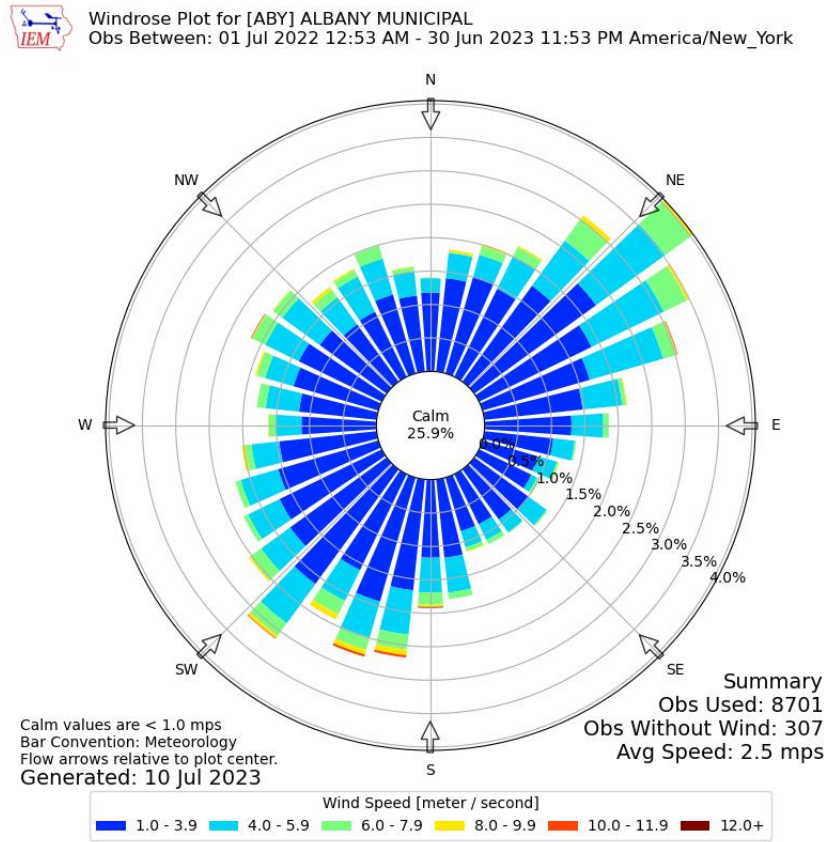
Albany Site Location Change

In accordance with 40 CFR 58.10 regarding relocation requests for State or Local Air Monitoring Stations (SLAMS), the GA AAMP provides the following documentation in support of moving the Albany ambient air monitoring site (13-095-0007). The Albany site is located within Dougherty County in the Albany MSA. The GA AAMP monitors PM_{2.5} data with collocated Partisol 2025 federal reference methods (FRMs), as well as a continuous federal equivalent method PM_{2.5} Teledyne T640 monitors. The PM_{2.5} Teledyne T640 monitor is set up as a non-National Ambient Air Quality Standards (NAAQS) monitor in the EPA's Air Quality System (AQS) at this location.

Due to the monitoring equipment being on the roof of the Turner Elementary School and an effort to improve the safety of the Site Operators and Field Auditors, GA AAMP is relocating the monitoring equipment to a platform on ground level. The following map shows the old and new locations (marked in yellow), as well as the distance between the two locations. The two locations are approximately 98.5 meters apart, as shown with the red line on the map. Since the relocation is within a mile, the GA AAMP will retain the same AQS ID number (13-095-0007) to keep continuity of the monitoring data.

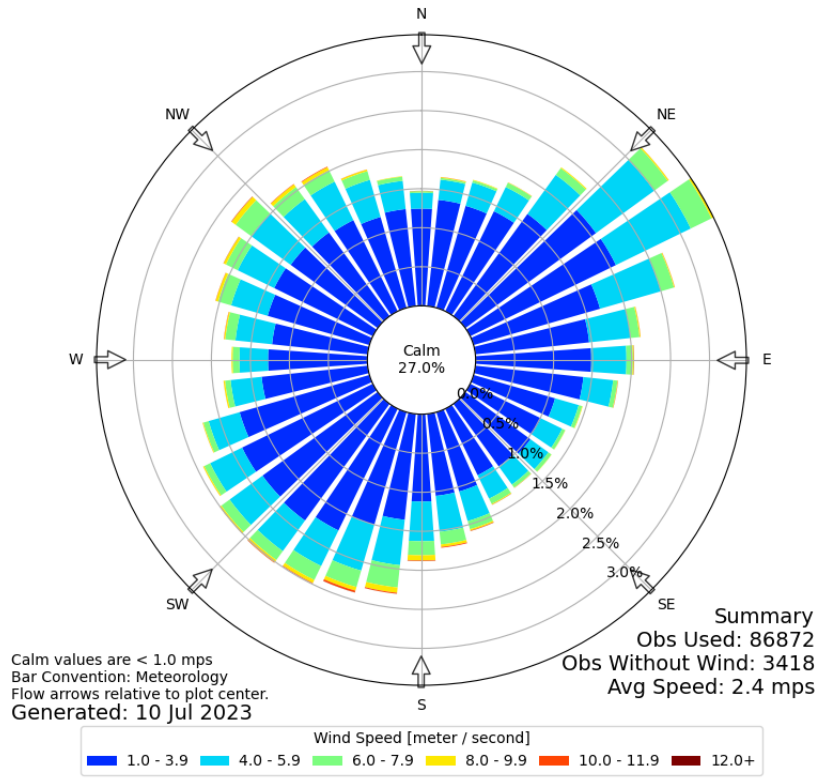


The following windroses show the annual average for July 1, 2022-June 30, 2023 and a 10-year average, respectively. These windroses were considered when selecting the new location at the Albany site.





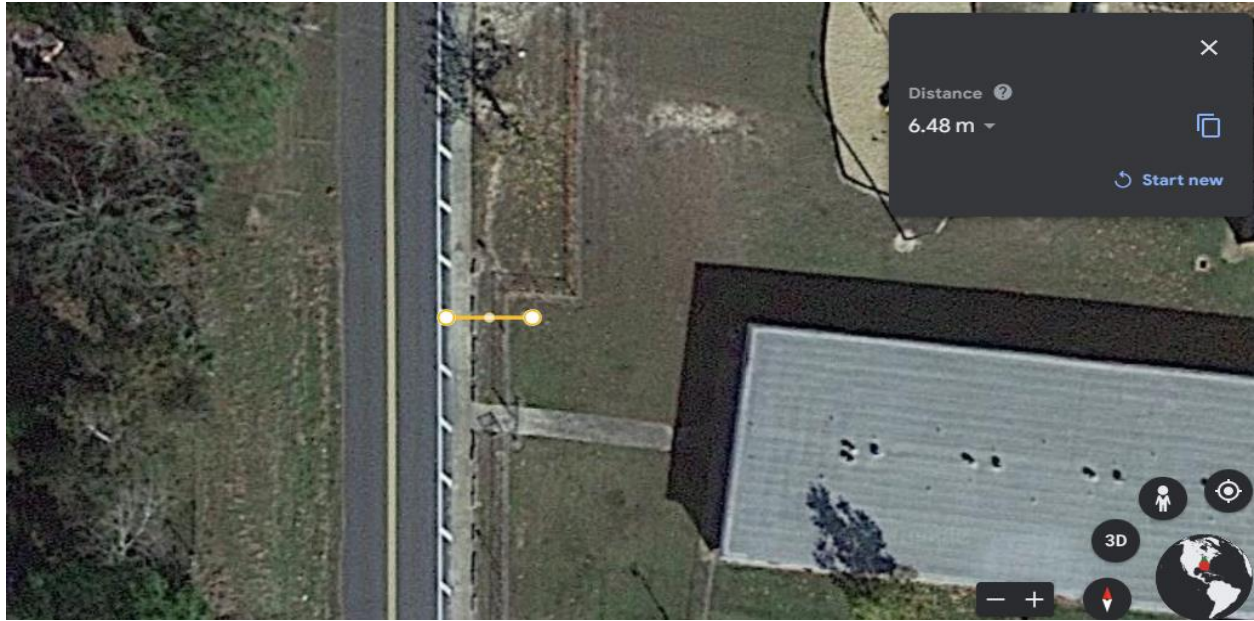
Windrose Plot for [ABY] ALBANY MUNICIPAL
Obs Between: 01 Jul 2013 12:53 AM - 30 Jun 2023 11:53 PM America/New_York



The next map shows four proposed locations (in yellow) that GA AAMP considered when deciding on the new location. Site B is adjacent to a gravel road that could impact sampling. With Site C, it would be difficult to access power at the location, and it would likely impinge on the school field activities. Site D would be adjacent to the school playground/school activities and would not be appropriate to have Site Operators and Field Auditors performing job functions (i.e., taking site photos) in that close proximity to a playground. Therefore, after considering the locations, Site A is the best option. Site A would not hinder any school activities, it is close to a power source, and the Site Operators/Field Auditors would have direct access without requiring access to the school property. The monitors will have 270° unobstructed fetch for wind flow.



The new location is approximately 6.48 meters from the nearest road.



The trees to the West of the site are approximately 25.18 meters from the new site location.



The distance to the tree to the North of the site is approximately 13.87 meters.

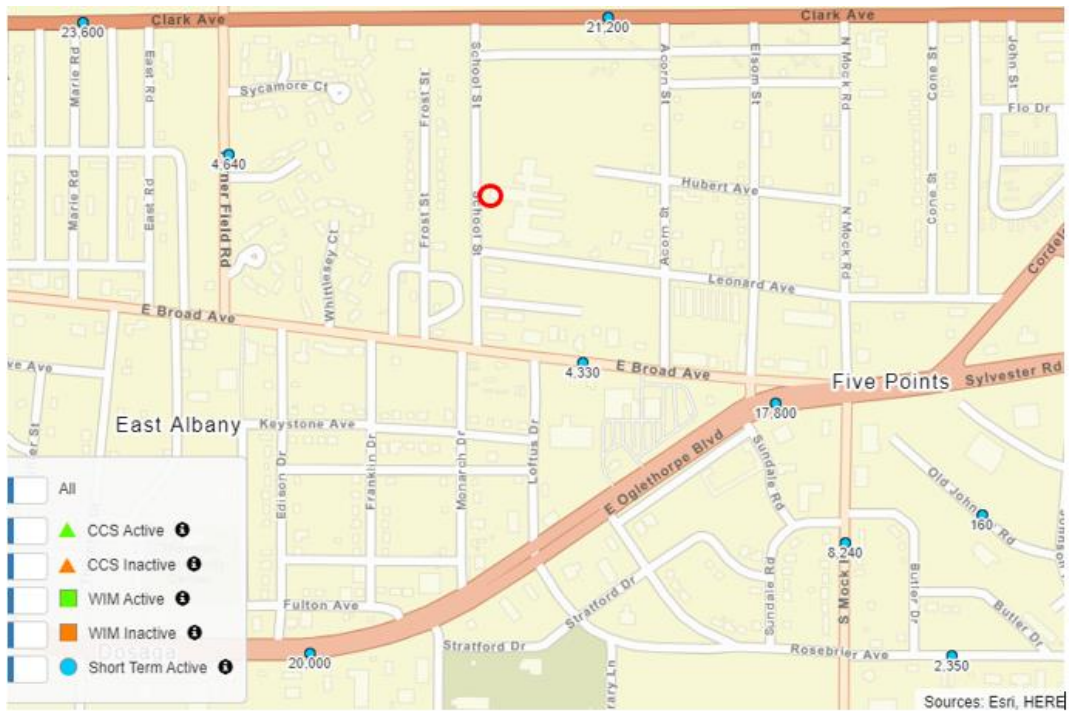


The next two photographs show the locations that were considered in the decision making process: Site A and Site B (marked with the yellow letters).



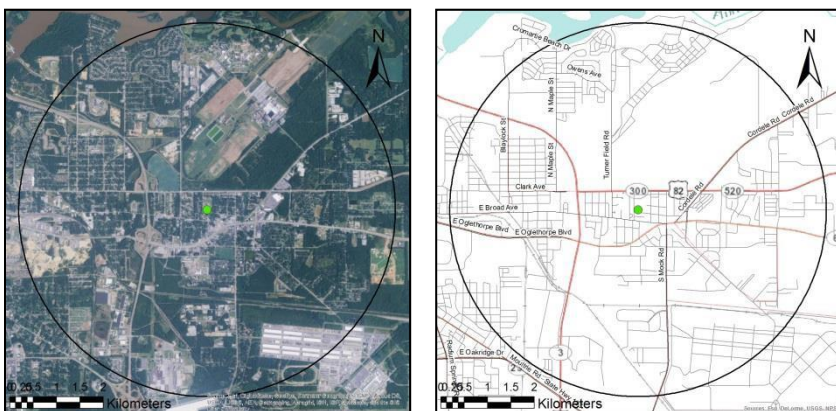


The map below shows the aerial view of the new location at ground level. The red circle indicates the new site location.



At the new Albany location, PM_{2.5} data will continue to be monitored with a federal reference method (FRM) Partisol 2025 on a daily sampling schedule, as well as on a continuous basis with the federal equivalent method (FEM) Teledyne T640 collecting data as a non-NAAQS monitor. The information below shows site details for the new Albany monitoring location with the deck and fencing installed as of the publication of this document.

Albany



AQS ID: 130950007

Address: Turner Elementary School, 2001 Leonard Avenue, Albany, Dougherty County, Georgia 31705

Site Established: 7/31/91

Latitude/Longitude: N31.57757/W-84.10087

Elevation: 62 meters

Area Represented: Albany MSA

Site History: Established as TSP site

North

South

East

West



Parameter	Monitoring Objective	Sampling Schedule	Probe Inlet Height	Spatial Scale	Begin Date
PM _{2.5}	Population Exposure	Daily	TBD	Neighborhood*	2/2/99
PM _{2.5}	Quality Assurance	Every 3 days	TBD	Neighborhood*	1/10/13
PM _{2.5}	Population Exposure	Continuous	TBD	Neighborhood*	5/11/08

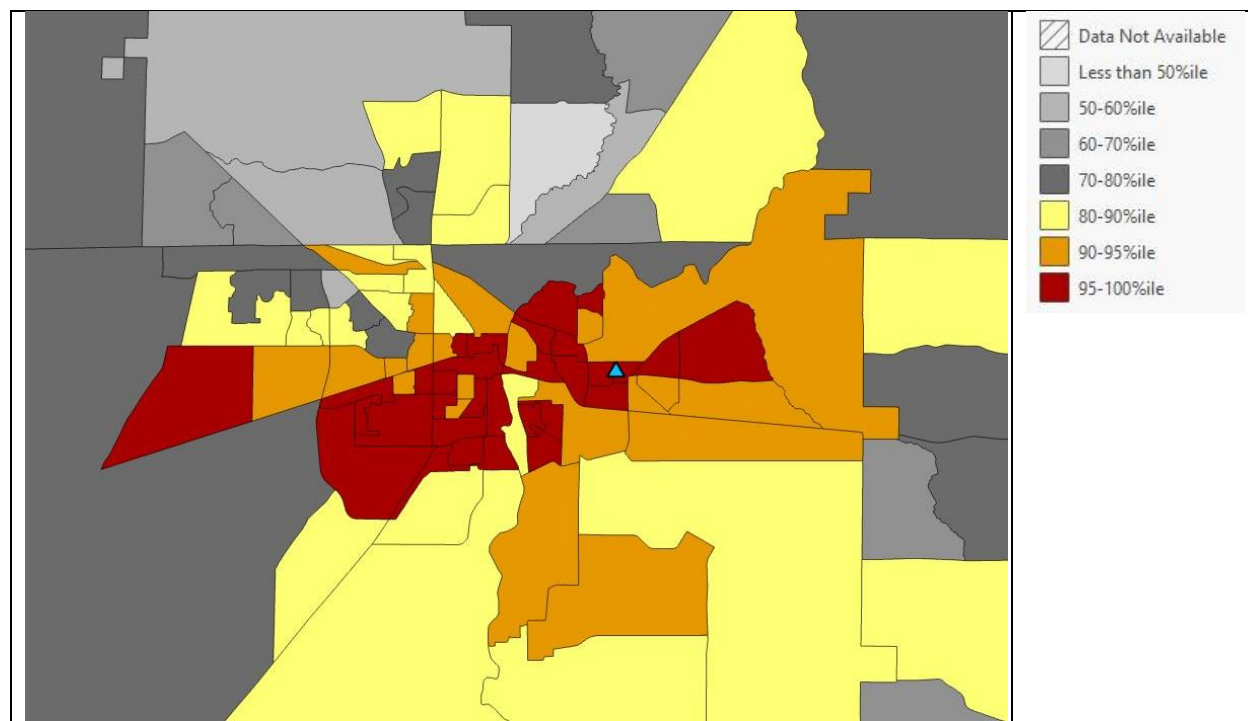
TBD: To be determined when monitors are in place.

*Requesting waiver for monitor location.

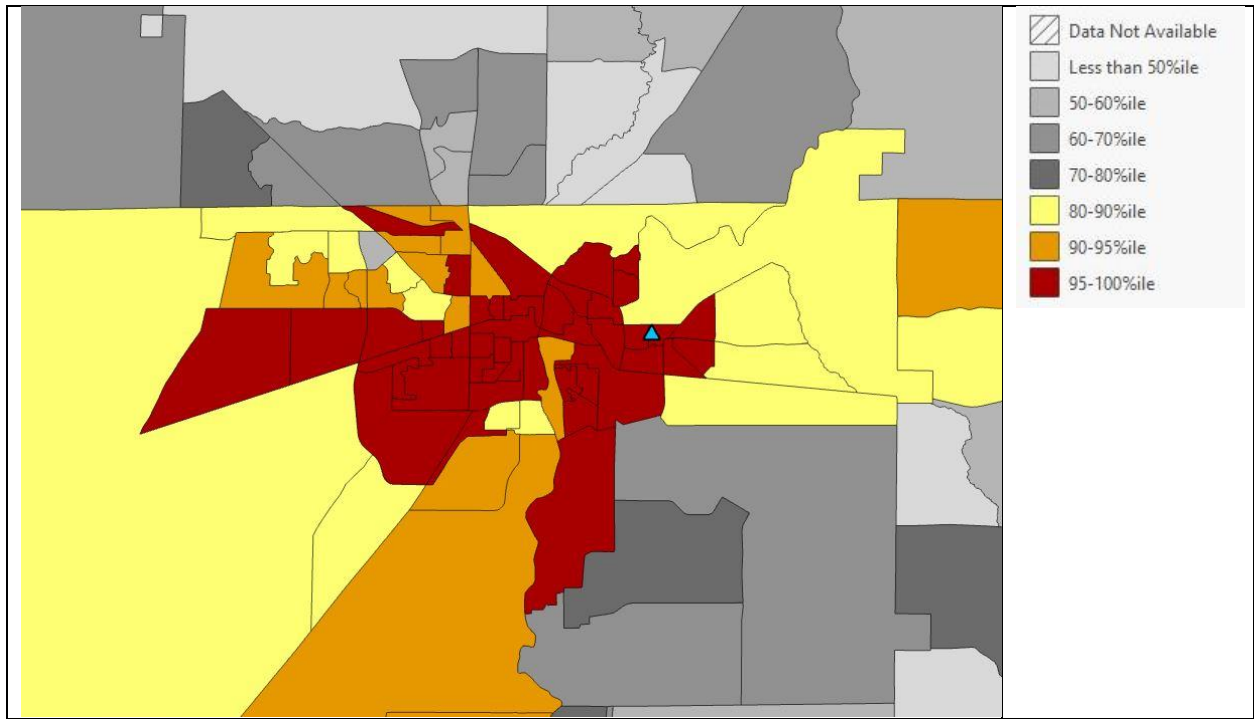
Waiver Request

Per 40 CFR Part 58, Appendix E, Section 10, GA AAMP is requesting a waiver for the new location of the monitors at the Albany site. Due to logistics, the monitors are less than 15 meters from the nearest road (School Street). After much consideration and discussion with EPA, GA AAMP and EPA are in agreement that the road has minimal impact on the air monitors and representative of the neighborhood scale. School Street has less than 4,430 annual average daily traffic count. In addition, as explained above, after much examination of the Turner Elementary School property, the monitors cannot reasonably be located in another area on the school property.

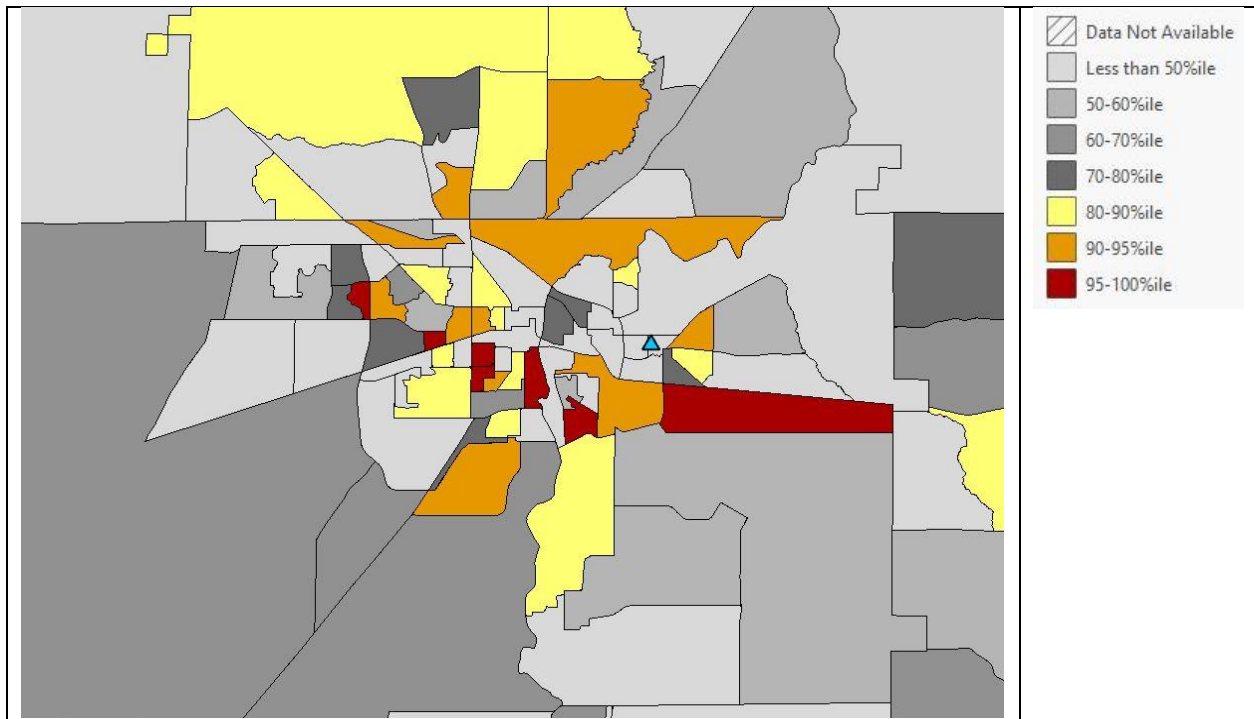
The current Albany site is important to maintain for the continuity of data collection. GA AAMP has collected data at the Albany site since 1991, and with long term data collection, the data can be used for trends and longevity analyses. In addition, the Albany site has consistently had some higher readings due to the agricultural burns in the area and beneficial to reflect concentrations in the Albany MSA. Furthermore, the location of the site at the Turner Elementary School is important for environmental justice (EJ) concerns. The site is located at an elementary school and able to represent the young sensitive population at the school. Please refer to the following EJ maps showing the Albany site location (blue triangle) in relation to several EJ factors. The darker red colors represent a higher percentage of the EJ factor being examined with each map. The following socioeconomic and environmental demographic information was obtained from EPA's EJScreen tool at <https://ejscreen.epa.gov/arcgis/rest/services/ejscreen>, using the 2022 and 2023 data as available.



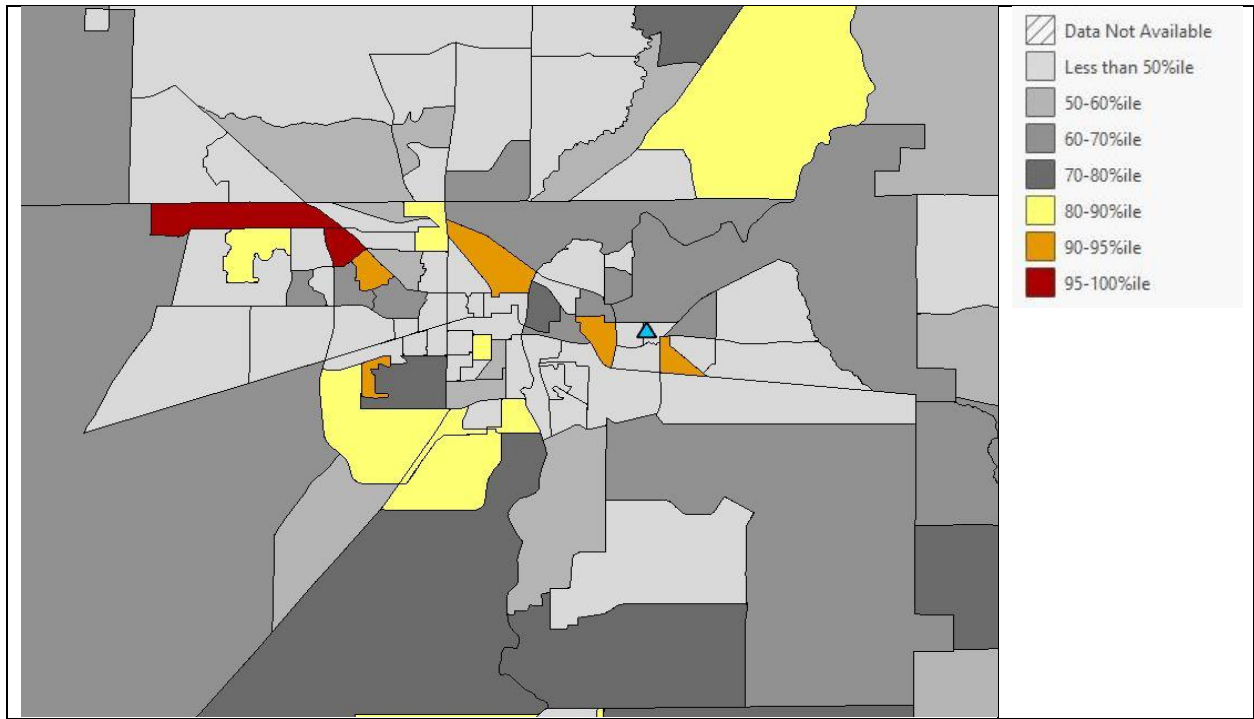
Albany 2023 Air Toxics Respiratory Index



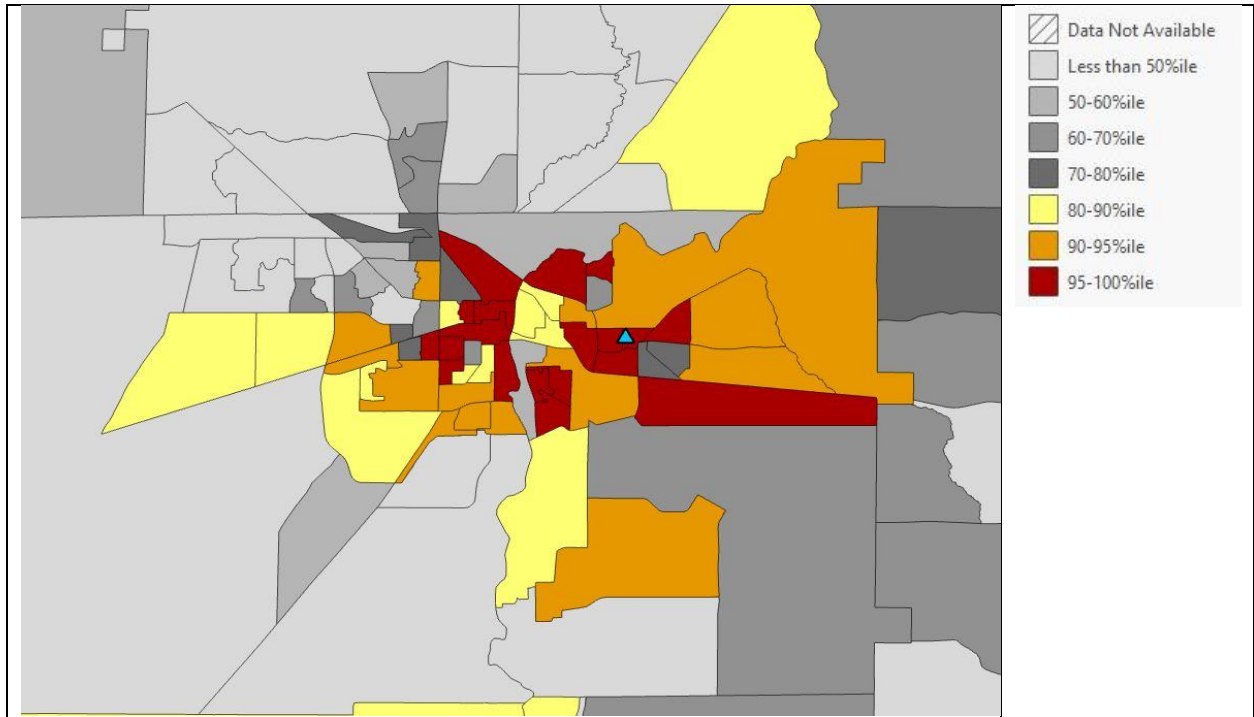
Albany 2023 Air Toxics Cancer Risk Index



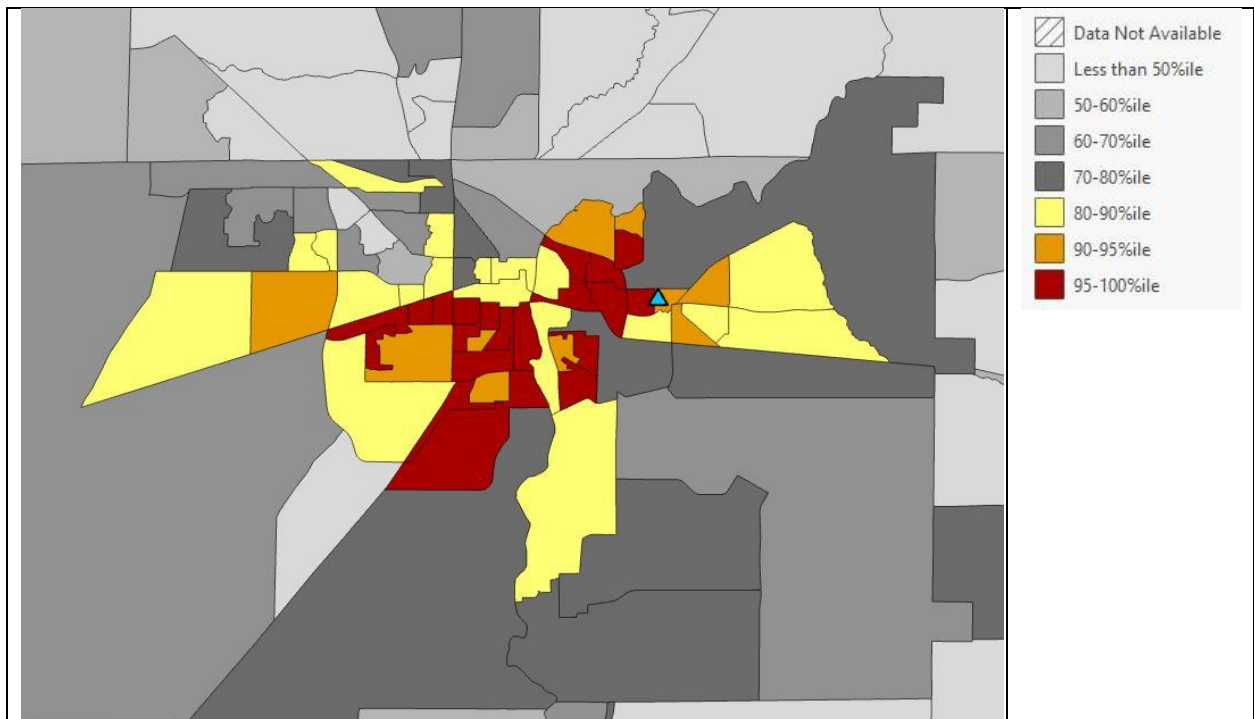
2022 Albany Under Age 5



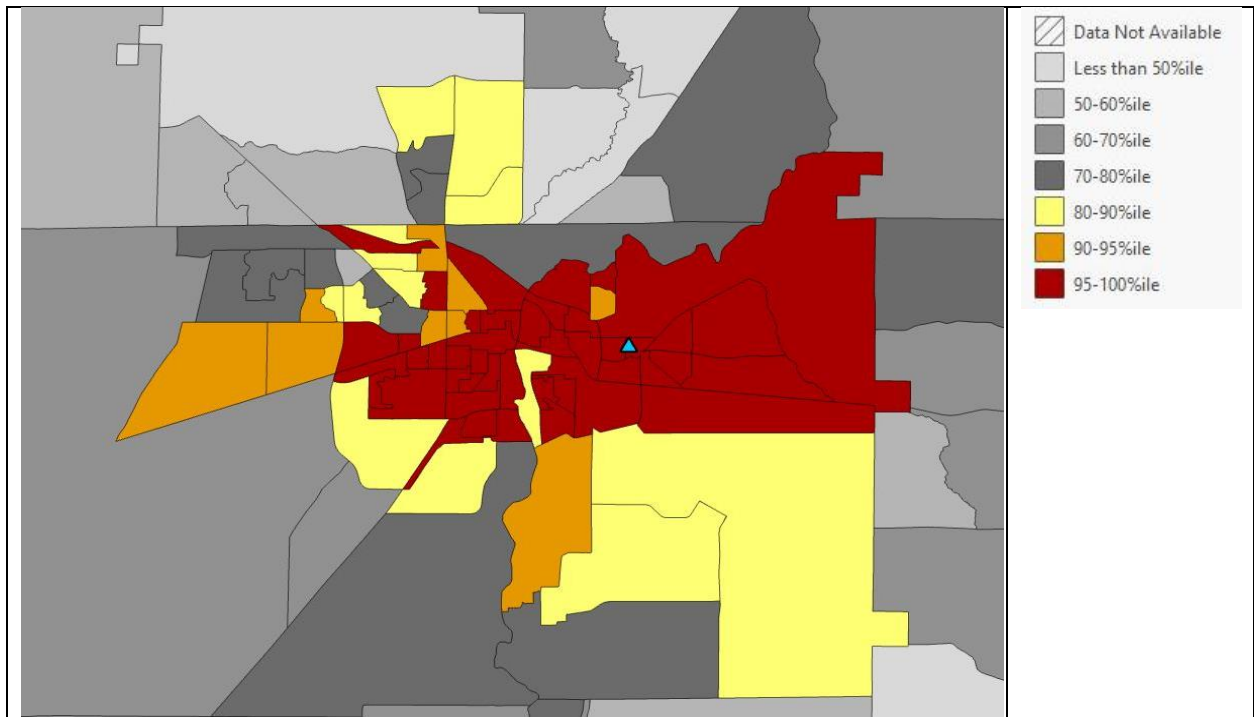
2022 Albany Over 64



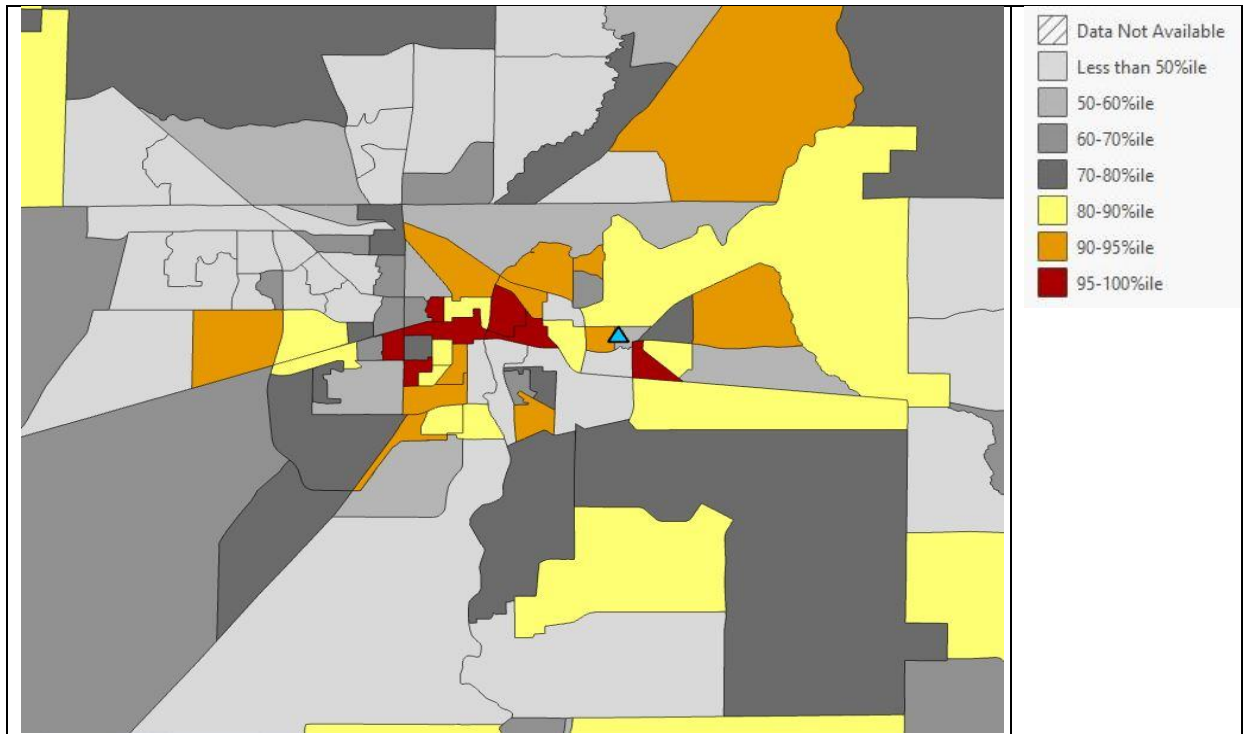
2023 Albany Low Income



2023 Albany Minority Population



2023 Albany Superfund Proximity



2023 Albany Less Than High School Education

Parameter and Method Code Changes

As of August 1, 2023, GA AAMP has implemented a new data alignment feature on the PM_{2.5} Teledyne T640(x)s installed at the Columbus-Airport site (13-215-0008), Augusta site (13-245-0091), and Albany site (13-095-0007). In addition, GA AAMP plans to install PM_{2.5} Teledyne T640(x)s with the new data alignment feature at the Columbus-Baker (13-215-0012), Forest Park (13-063-0091), Kennesaw (13-067-0003) and Macon Allied (13-021-0007) sites. GA AAMP will take up to the next two years to evaluate the Teledyne T640(x)s with the data alignment feature, and compare the data collected with the PM_{2.5} FRMs. GA AAMP has PM_{2.5} FRMs, with data compared to the PM_{2.5} NAAQS, at each of the sites where this evaluation is taking place. During this evaluation period, these Teledyne T640(x) monitors with the data alignment feature will not be compared to the PM_{2.5} NAAQS. These monitors will change from State and Local Ambient Monitoring Stations (SLAMS) to Special Purpose Monitors (SPMs) (or will be labeled as SPMs for the newly installed monitors) and will reflect the data alignment feature method code in EPA's AQS. The data will continue to be used for the Air Quality Index (AQI) reporting both to EPA's Air Now website as well as the GA AAMP website <https://airgeorgia.org/>. GA AAMP requests that EPA concur with this adjustment in AQS to not compare these monitors to the PM_{2.5} NAAQS for up to two years during this time of evaluation.

The following table shows all the PM_{2.5} Teledyne T640(x)s that GA AAMP will have listed as SPM, with the AQI data being reported to Air Now and the GA AAMP website.

Teledyne T640(x) Listed as SPM
Albany (13-095-0007)
Augusta (13-245-0091)
Columbus-Airport (13-215-0008)
Columbus-Baker (13-215-0012)
Forest Park (13-063-0091)
Kennesaw (13-067-0003)
Macon-Allied (13-021-0007)

Comments

The *Addendum to the 2023 Ambient Air Monitoring Plan* was available for public comment from August 17, 2023 through September 17, 2023. During this comment period, GA AAMP received a comment from EPA that GA AAMP needed to specify that the installation of the PM_{2.5} Teledyne T640(x)s with the new data alignment feature at the Columbus-Baker (13-215-0012), Forest Park (13-063-0091), Kennesaw (13-067-0003) and Macon Allied (13-021-0007) sites would include that these monitors would be Special Purpose Monitors (SPMs), and that GA AAMP would evaluate the data collected from these monitors for up to two years. This modification was addressed in the section above and the introduction. No other comments were received.