

# Florida Department of Environmental Protection

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Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

June 28, 2018

Ms. Beverly H. Banister Director Air, Pesticides, and Toxics Management Division United States Environmental Protection Agency – Region 4 61 Forsyth Street Atlanta, Georgia 30303-8960 Banister.Beverly@epa.gov

Dear Ms. Banister:

Enclosed is the 2018 Annual Air Monitoring Network Plan for the State of Florida as required by 40 CFR Part 58.10. This plan includes the air monitoring network for FDEP and local air agencies operating in the state. The plan was made available for public inspection and comment at <u>https://floridadep.gov/air/air-monitoring/documents/2018-annual-air-monitoring-network-plan</u> for 30 days (May 24, 2018 through June 25, 2018) prior to this submission. No public comments were received during this period.

If you have any questions, you may contact me at <u>sandra.veazey@dep.state.fl.us</u> or at (850) 717-9042, or Oriene "Saphique" Thomas at <u>oriene.thomas@dep.state.fl.us</u> or (850) 717-9015.

Sincerely,

I Decze

Sandra F. Veazey, Administrator Office of Air Monitoring Division of Air Resource Management

Enclosure

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# **Florida Department of Environmental Protection**

# 2018 Annual Air Monitoring Network Plan

# Division of Air Resource Management Florida Department of Environmental Protection June 2018

Florida Department of Environmental Protection Division of Air Resource Management 2600 Blair Stone Road Tallahassee, Florida 32399-2400 <u>www.floridadep.gov</u>



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# **1.0 INTRODUCTION**

The Florida Department of Environmental Protection (DEP) has developed and maintains a comprehensive ambient air monitoring network that covers over 90 percent of the 20 million people living in Florida, the third most populous state in the United States. This network is designed to provide the public with accurate air quality information, and currently meets or exceeds federal air monitoring requirements.

The network is comprised of more than 213 monitors at 97 sites strategically positioned across the state. As shown in Figure 1.1, these sites are concentrated in areas of higher population density, along the coast, and near interstate highways. In addition, the Department established three rural monitoring sites as representative locations for comparison to regional background levels of pollution: one in the panhandle, one in the northern area of the peninsula, and one in the southern area of the peninsula.

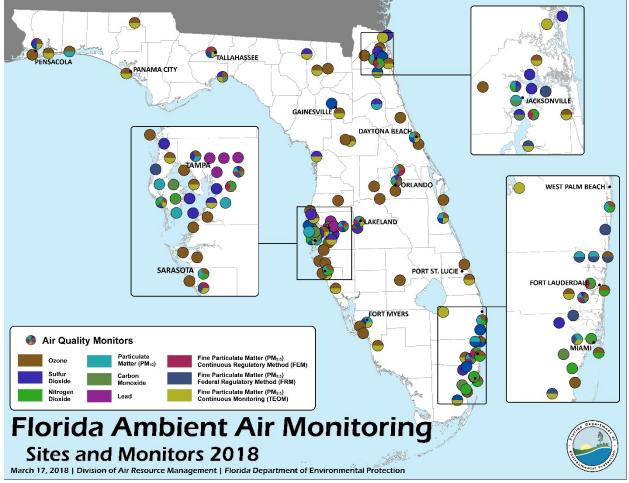


Figure 1.1 2018 Site Locations for Florida's Ambient Air Monitoring Network

All of Florida's monitoring agencies are managed under a Primary Quality Assurance Organization (PQAO) to ensure that monitoring is conducted pursuant to a common set of procedures, using common calibration facilities and standards, and with oversight by a single air quality agency. DEP's Division of Air Resource Management is the coordinating agency that oversees this PQAO, which consists of DEP and nine Local Programs (see Table 1.1 below).

DEP's Division of Air Resource Management	Local Programs
Office of Air Monitoring	Broward County
Emerald Coast (Panama City area)	City of Jacksonville
First Coast (Jacksonville area)	Hillsborough County
Forgotten Coast (Tallahassee area)	Manatee County
Lee Island Coast (Ft. Myers area)	Miami-Dade County
Nature Coast (Gainesville area)	Orange County
Naval Aviation Coast (Pensacola area)	Palm Beach County
Space Coast (Orlando area)	Pinellas County
Sun Coast (Tampa area)	Sarasota County

 Table 1.1 Florida's Primary Quality Assurance Organization

Florida's air monitoring network is designed to provide timely air pollution data to the public, support compliance with ambient air quality standards, develop emission reduction strategies, and support air pollution research studies. Data gathered from Florida's monitoring network are used to:

- Determine an area's compliance with the National Ambient Air Quality Standards (NAAQS);
- Produce a daily Air Quality Index (AQI) report;
- Compile daily air quality forecast reports;
- Support short and long-term health risk assessments;
- Identify localized health concerns; and
- Track long-term trends in air quality that could potentially affect the quality of life of Florida's residents and visitors.

This Annual Air Monitoring Network Plan is a requirement of the Code of Federal Regulations (40 CFR 58) established by the U.S. Environmental Protection Agency (EPA). The purpose of this report is to provide evidence that Florida's air monitoring network meets current regulations, detail any changes proposed for the 18-month period following its publication, and provide specific information on each of the state's existing and proposed monitoring sites. Federal regulations require that the plan be posted for public comment 30 days before submission to the EPA Regional Office. The plan was made available to the public on the DEP website from May 24, 2018 through June 25, 2018 for the 30-day comment period. No comments were received from the public and any comments provided by Region 4 EPA were addressed appropriately.

# 2.0 AIR MONITORING NETWORK 2018

On January 1, 2015, the U.S. Environmental Protection Agency (US EPA) designated the State of Florida as one Primary Quality Assurance Organization (PQAO) responsible for monitoring air pollution. Florida's PQAO consists of Florida DEP as the lead agency, and 9 local air monitoring organizations throughout the state. Florida's air monitoring network is critical for assessing the state's progress in maintaining and improving air quality, understanding temporal variations in air pollutants and evaluating pollutant exposure by individuals and the environment. One fundamental purpose of monitoring is to distinguish between areas where pollutant levels violate the ambient air quality standards and areas where they do not. Areas in violation of a standard require increased efforts to reduce the pollution that results in exceedances. Air quality agencies develop strategies, programs and regulations to achieve needed emission reductions. Data from the Florida's air monitoring network are then used to determine the rate of progress toward attaining the standards.

DEP submitted its 2016-2017 Annual Air Monitoring Network Plan to EPA on June 30, 2017 for review and approval. After completing its review, EPA approved Florida's 2016-2017 Annual Air Monitoring Network Plan on October 19, 2017, except for four siting criteria waiver requests. This plan represents the 2018 Annual Air Monitoring Network Plan and was submitted to EPA for review and approval by June 30, 2018.

# 2.1 NETWORK DESIGN PRINCIPLES

The principles that guide Florida's network design are:

- 1. Sites will meet the Code of Federal Regulations for the number, type and placement of monitors.
- 2. Attention will be paid to historic areas of exceedances or violations where contributing industries, activities, and/or population have been maintained.
- 3. There will be sufficient ozone and fine particle pollution monitors to maintain AQI reporting for large (350,000+ population) communities.
- 4. During network design, weight will be given to monitors that have long historical records.
- 5. Partnerships with private entities will be used judiciously.
- 6. Any monitoring required by the State Implementation Plans (SIP) will continue.
- 7. Coordination with Florida's local programs will be maintained to achieve a quality statewide network.

Details of the network are in the "Network Description and Requirements" section of this plan. The network description is organized first by the largest Metropolitan Statistical Areas followed by the monitoring of areas not within a Metropolitan Statistical Area. Nine county agencies assist DEP in the operation of the statewide air monitoring network. Each county's Metropolitan Statistical Areas or Micropolitan Statistical Area is identified. Requirements for the minimum number of monitoring sites are dependent on both population and population concentration for ozone, PM<sub>2.5</sub> and PM<sub>10</sub>. The recently calculated Population Weighted Emission Index (PWEI) is listed for any areas with a PWEI over 5,000 where monitoring for sulfur dioxide is required.

The Air Quality Index (AQI) is reported and updated hourly on DEP's website at <u>https://floridadep.gov/air/air-monitoring/content/air-quality-today</u>. It is available in both graphical and text versions. The data to support this website are collected from all continuous monitors in the state. These data are also shared on EPA's AIRNOW site at <u>www.airnow.gov</u>.

An Air Monitoring Network Plan is also required to provide evidence that siting and operation of each monitor meets the requirements of Appendices A, B, C, D and E of 40 CFR Part 58, where applicable. Appendix A specifies the minimum quality system requirements applicable to State and Local Air Monitor Stations (SLAMS) and other monitor types whose data are intended to be used

to determine compliance with NAAQS. Florida meets 40 CFR Part 58, Appendix A requirements with three basic functions:

- 1. A quality system must have approved standard operating procedures (SOP), a Quality Management Plan (QMP) and Quality Assurance Project Plans (QAPP), which are in place and updated as needed. The Gaseous QAPP was approved in April 2018 and the  $PM_{2.5}$  QAPP was approved in July 2012 and is currently under revision. The current QMP was approved in December 2014.
- 2. DEP Quality Assurance staff complete instrument performance and technical systems audits for all agencies throughout the state.
- 3. All quality assurance and quality control records must be sent to EPA's Air Quality System (AQS) database quarterly.

40 CFR Part 58, Appendix B, describes quality assurance requirements for Prevention of Significant Deterioration (PSD) air monitoring. Florida's air monitoring network does not include any PSD monitors; therefore, these requirements are not applicable.

40 CFR Part 58, Appendix C, describes general ambient air quality monitoring methodology. Florida's air monitoring network is comprised of both federally and non-federally approved instrumentation. Only data from the federally approved instrumentation can be used for designations. Additionally, all instruments are subjected to the same quality assurance and quality control requirements as those used for designations. Florida's instrumentation meets 40 CFR Part 58, Appendix C requirements and are described in detail in Appendix C of this Plan.

40 CFR Part 58, Appendix D, contains the network design criteria for ambient air quality monitoring. Sites within Florida's air monitoring network are established using these requirements. This Annual Air Monitoring Network Plan assesses the network's ability to meet these requirements.

40 CFR Part 58, Appendix E, contains the probe siting criteria for ambient air quality monitoring. To assure that these requirements continue to be met, sites are reviewed annually by DEP QA audit staff. The results of these reviews are used to determine if the sites meet siting requirements. Any discrepancies are dealt with, at minimum, on an annual basis. A table summarizing the site reviews conducted in the last year, as well as any issues discovered, is provided in Appendix B of this Plan. All of Florida's sites meet 40 CFR Part 58, Appendix E unless explicitly noted in Appendix B of this Plan.

# 2.2 NETWORK EQUIPMENT UPGRADES AND ENHANCEMENT

Over the last several years, the PQAO has made extensive investments into Florida's air monitoring network. These upgrades and enhancements have been implemented to take advantage of software and hardware technological advancements for greater operational efficiency. These equipment upgrades are reflected in the "Network Description and Requirements" and "Network Equipment Evaluation" sections of the plan. The following, Table 2.1, are major equipment purchases and upgrades accomplished during the last 18 months:

A	Quantit	Equipment Durcheses
Agency	Quantity	Equipment Purchases
DEP	10	Agilaire 8872 Datalogger
DEP	4	Thermo TEOM 1405 Continuous Ambient Particulate Monitors
DEP	4	Teledyne-API T640 PM Mass Monitor
DEP	2	Teledyne-API T640X PM Mass Monitor
DEP	4	Teledyne-API T751H Zero Air Portable Generators
DEP	1	Water Bath
DEP	1	MET Tower
Broward County	4	Thermo Model 49iQ Ozone Analyzer
Broward County	3	Met One E-BAM Plus
Broward County	1	Thermo 42iY-TLE Nitrogen Dioxide Analyzer
Broward County	2	Teledyne-API T640 PM Mass Monitor
Broward County	1	ATEC Sampler
City of Jacksonville	4	BGI Tetra Cal
City of Jacksonville	8	Teledyne-API T701H Zero Air Generator
City of Jacksonville	2	Thermo TEOM 1405 Continuous Ambient Particulate Monitors
City of Jacksonville	1	Thermo Model 49iQ Ozone Analyzer
City of Jacksonville	1	Thermo Model 49iQ-PS Ozone Calibrator
City of Jacksonville	1	Site Shelter
City of Jacksonville	9	Agilaire 8872 Datalogger
City of Jacksonville	2	Teledyne-API T640 PM Mass Monitor
Hillsborough County	1	Teledyne-API T701H Zero Air Generator
Hillsborough County	1	Agilaire 8872 Datalogger
Hillsborough County	1	ATECH 8000 Carbonyl Sampler
Hillsborough County	1	Thermo 49i-PS UV Photometric Ozone Calibrators
Hillsborough County	1	Thermo 49i Ozone Analyzer
Hillsborough County	2	Thermo TEOM 1405 Continuous Ambient Particulate Monitors
Manatee County	1	Agilaire 8872 Datalogger
Miami-Dade County	2	Thermo Model 48iQ Carbon Monoxide Analyzer
Miami-Dade County	2	Teledyne-API T640 PM Mass Monitor
Miami-Dade County	2	Teledyne-API T640X PM Mass Monitor
Orange County	1	Sierra Wireless AirLink GX450-Gateway
Orange County	1	Thermo Model 49iQ Ozone Analyzer
Orange County	1	Thermo Model 42iQ Nitrogen Dioxide Analyzer
Orange County	1	Thermo Model 146iQ Multi-Gas Calibrator
Orange County	1	Bios DryCal Definer 220-L

 Table 2.1 Equipment Purchases 2017-2018

Palm Beach County	1	ESC 8872 Datalogger
Palm Beach County	1	Site Shelter
Palm Beach County	1	Cradle Point MBR 1200B Router
Pinellas County	1	Environics 6100 Multi-gas Calibrator
Pinellas County	1	Teledyne-API T640X PM Mass Monitor
Pinellas County	1	Teledyne-API T640 PM Mass Monitor
Pinellas County	3	ATEC 2200 VOC Samplers
Pinellas County	1	Site Shelter
Pinellas County	1	Laboratory Grade Refrigerator
Sarasota County	1	Thermo Model 49iQ Ozone Analyzer
Sarasota County	1	Thermo Model 49iQ-PS Ozone Calibrator

# 3.0 AIR MONITORING NETWORK MODIFICATIONS

This Air Monitoring Network Plan lists the known changes to the network that have occurred in the last 18 months and those expected to occur in FY 2018. The discussion within this plan is organized as follows:

- Sites scheduled to shut-down or relocate;
- Scheduled monitor changes and discontinuations;
- Changes to PM<sub>2.5</sub> FRM operating schedules; and
- Network descriptions organized by pollutant for 2018.

This plan also provides additional site information in Appendix A, a summary of all site reviews for the network in Appendix B and a complete inventory list in Appendix C. DEP reserves the right to make unplanned network changes in the event a site needs to be closed or relocated due to events beyond our control. These may include, but are not limited to, issues with site access and unpredictable circumstances. Significant network modifications for 2018 are provided in Table 3.1.

Table 3.1 Summary of Network Modifications

AQS Site #	Site Name	Parameter	Modification					
12-011-0034	Daniela Banu (NCore Site)	PM <sub>10</sub> (Primary & Collocated monitors)	Close: 12/2017; Replaced by FEM					
		Continuous PM <sub>10</sub>	Addition: 1/2018; FEM					
12-011-5005	Coconut Creek	PM <sub>10</sub>	Close: 12/2017; Replaced by FEM					
12-011-3003	Coconut Creek	Continuous PM <sub>10</sub>	Addition: 1/2018; FEM					
12-086-0019	Pennsuco	$SO_2$	Monitoring Objective change from Source to Population Exposure based on EPA Audit Recommendations.					
12-086-0034	Kendall	СО	Close Expected: 7/2018					
12-080-0034	Kendali	Continuous PM <sub>2.5</sub>	Addition Expected: 7/2018; TEOM					
12-086-1016	Miami Fire Station	PM <sub>10</sub> (Primary & Collocated monitors), PM <sub>2.5</sub> (Primary monitor) and Continuous PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM					
		Continuous PM <sub>2.5</sub> and Continuous PM <sub>10</sub>	Addition Expected: 7/2018; FEM					
12-103-1009	Sandy Lane	PM <sub>2.5</sub>	Close Expected: 12/2018					
12-103-0004	St. Petersburg College	Continuous PM <sub>2.5</sub>	Addition Expected: 1/2019; FEM					
12-103-0018	Azalea Park	Continuous PM <sub>2.5</sub> and Continuous PM <sub>10</sub>	Addition: 1/2018; FEM					
12 105 0010		Continuous PM <sub>2.5</sub>	Close: 11/2017; TEOM; Replaced by FEM					
		PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM					
12-103-3004	County Motorpool	PM <sub>10</sub> (Collocated monitor)	Close Expected: 7/2018					
12-031-0032	Kooker Park	PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by Continuous TEOM Monitor					
12-031-0080	Southside Playground	CO and SO <sub>2</sub>	Close: 3/2018					
12-031-0084	Rosselle	СО	Close Expected: 7/2018					

		Continuous PM <sub>10</sub>	Close/Relocation Expected: 7/2018			
12-031-0108	Pepsi Place	Continuous PM <sub>10</sub>	Addition Expected: 7/2018; Relocation from Rosselle			
12-031-0097	Fort Caroline	$SO_2$	Close Expected: 7/2018			
12-117-1002	Sanford	Continuous PM <sub>2.5</sub>	Addition Expected: 7/2018; FEM			
		Continuous PM <sub>2.5</sub>	Close: 3/2018; TEOM; Replaced by FEM			
12-115-0013	Bee Ridge	PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM			
		Continuous PM <sub>2.5</sub>	Addition Expected: 1/2018; FEM			
12-071-0005	Winkler Pump	PM <sub>2.5</sub> and Continuous PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM			
	Station	Continuous PM <sub>2.5</sub>	Addition Expected: 1/2018; FEM			
12-105-6006	Baptist Children's	PM <sub>2.5</sub> and Continuous PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM			
	Home	Continuous PM <sub>2.5</sub>	Addition Expected: 1/2018; FEM			
12-127-2001	Port Orange	Ozone	Close: 3/2018			
12-127-5002	Daytona - Blind	PM <sub>2.5</sub> and Continuous PM <sub>2.5</sub>	Close Expected: 7/2018; Replaced by FEM			
	Services	Continuous PM <sub>2.5</sub>	Addition Expected: 1/2018; FEM			
12-033-0004	Ellyson Industrial Park	Continuous PM <sub>2.5</sub>	Close: 6/2017			

# 3.1 SITE SHUT-DOWNS, SET-UPS AND RELOCATIONS

# A. Site Shut-downs

# Volusia County – Port Orange: AQS Site # 12-127-2001

DEP abruptly lost access to the Port Orange site due to privacy fencing which was installed in front of the entry gate, by the property owner. DEP was unsuccessful in resolving the access issue and requested approval from EPA for discontinuance of the site. The Port Orange site operates an ozone  $(O_3)$  SLAMS monitor. The request to discontinue the monitoring does not compromise data collection needed for implementation of a NAAQS and the requirements of Appendix D of Part 58 will continue to be met.

The site was removed on March 31, 2018 and temporary approval was granted by EPA on April 5, 2018. DEP requests approval for permanent site closure. See Appendix A for a copy of EPA's temporary approval letter.

### <u>City of Jacksonville – Southside Playground: AQS Site # 12-031-0080</u>

The Jacksonville Electric Authority (JEA) requested the removal of the Southside Playground site from their property based on plans to begin construction after March 31, 2018. The Southside Playground site operates a sulfur dioxide (SO<sub>2</sub>) and a carbon monoxide (CO) monitor, which are designated as SLAMS and Special Purpose Monitor (SPM), respectively. The request to discontinue the monitoring does not compromise data collection needed for implementation of a NAAQS and the requirements of Appendix D of Part 58 will continue to be met.

To accommodate JEA's request, the site was removed on March 30, 2018 and temporary approval was granted by EPA on April 5, 2018. DEP requests approval for permanent site closure. See Appendix A for a copy of EPA's temporary approval letter.

### City of Jacksonville – Rosselle: AQS Site # 12-031-0084

DEP is requesting approval to close the Rosselle site (AQS Site #: 12-031-0084) in the City of Jacksonville as of July 1, 2018. The Rosselle site operates two SLAMS monitors, a CO and Continuous  $PM_{10}$ . This monitoring site meets several scenarios defined in EPA's Network Assessment Guidance and 40 CFR 58.14(c), where the state or local agency can confidently request approval for the shutdown of a SLAMS monitor. These include:

- The monitors showed attainment during the last five years;
- The probability is less than 10% that these monitors will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past;
- The monitors are not specifically required by an attainment plan or maintenance plan, as it is an attainment area which is expected to remain in attainment; and
- The monitors have not measured violations of the CO or  $PM_{10}$  NAAQS in the last five years.

However, in accordance with DEP's suggestion, the  $PM_{10}$  monitor will be relocated to the Pepsi Place (Near-road) site, AQS Site # 12-031-0108, to ensure that the  $PM_{10}$  monitoring requirements continue to be met for the Metropolitan Statistical Area (MSA). The Rosselle site is scheduled to close on July 1, 2018. A summary of the evaluation DEP performed for these monitors using EPA's Ambient Air Monitoring Network Assessment Guidance (AAMNAG) document is provided below in Table 3.2.

# <u>City of Jacksonville – Fort Caroline: AQS Site # 12-031-0097</u>

DEP is requesting approval to remove the  $SO_2$  monitoring site located at Fort Caroline in Jacksonville as of July 1, 2018. This single pollutant monitoring site meets several scenarios defined in EPA's Network Assessment Guidance and 40 CFR 58.14(c), where the state or local agency can confidently request approval for the shutdown of a SLAMS monitor. These include:

- The monitor showed attainment during the last five years;
- The probability is less than 10% that this monitor will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past;
- The monitor is not specifically required by an attainment plan or maintenance plan, as it is an attainment area which is expected to remain in attainment; and
- The monitor has not measured violations of the SO<sub>2</sub> NAAQS in the last five years.

The removal of this monitor will allow more flexibility of resources and for greater emphasis to be placed on other criteria pollutants. A summary of the evaluation DEP performed for this monitor using EPA's Ambient Air Monitoring Network Assessment Guidance (AAMNAG) document is provided below in Table 3.2.

#### Pinellas County – Sandy Lane: AQS Site # 12-103-1009

DEP is requesting approval to remove the  $PM_{2.5}$  monitoring site located at Sandy Lane in Pinellas County as of December 31, 2018. This single pollutant monitoring site meets several scenarios defined in EPA's Network Assessment Guidance and 40 CFR 58.14(c), where the state or local agency can confidently request approval for the shutdown of a SLAMS monitor. These include:

- The monitor showed attainment during the last five years;
- The probability is less than 10% that this monitor will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past;
- The monitor is not specifically required by an attainment plan or maintenance plan, as it is an attainment area which is expected to remain in attainment; and
- The monitor has not measured violations of the  $PM_{2.5}$  NAAQS in the last five years.

The removal of this monitor will allow more flexibility of resources and for greater emphasis to be placed on the statewide endeavor to reduce the filter-based  $PM_{2.5}$  network. As a result, an FEM T640 monitor will be added to the St. Petersburg College site (AQS Site # 12-103-0004) to ensure continued  $PM_{2.5}$  coverage within the Clearwater, FL area. A summary of the evaluation DEP performed for this monitor using EPA's Ambient Air Monitoring Network Assessment Guidance (AAMNAG) document is provided below in Table 3.2.

AQS Site #	Site Name	Туре	Pollutant	Showed Attainment 2012-2016	Probability <10% Monitor Will Exceed 80% of NAAQS	Monitor Specifically Required by Attainment or Maintenance Plan	Last Monitor in Nonattainment or Maintenance Area	CFR Required	Modification	Comments
12-031-0084	Rosselle	SLAMS	СО	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 3.14
12-031-0097	Fort Caroline	SLAMS	$SO_2$	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 3.14
12-103-1009	Sandy Lane	SLAMS	PM <sub>2.5</sub>	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 3.14
12-103-3004	County Motorpool	SLAMS	PM <sub>10</sub>	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 3.14

Section 4.1 of the AAMNAG states that a monitor can be removed (after Regional Administrator approval) if it is currently in attainment with the applicable NAAQS standard and if the following four tests can be met:

- 1. The  $PM_{2.5}$ , ozone, CO,  $PM_{10}$ , SO<sub>2</sub>, lead, or NO<sub>2</sub> monitor showed attainment during the previous five years.
- 2. The probability is less than 10% that the monitor will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past. This can be done using the following equation:

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

 $\overline{X}$  is the average design value for the last 5 years

*t is the student's t value for n-1 degrees of freedom at the 90% confidence level* 

*s is the standard deviation of the design values* 

*n is the number of records (i.e., number of design values)* 

NAAQS is the standard of interest.

- 3. The monitor is not specifically required by an attainment plan or maintenance plan.
- 4. The monitor is not the last monitor in a nonattainment area or maintenance area that contains a contingency measure triggered by an air

quality concentration in the latest attainment or maintenance plan adopted by the state and approved by EPA.

All monitors listed in Table 3.13 passed these tests and the probability test results are listed in Table 3.14 below.

		Averaging		De	sign Va	lue		$\overline{\mathbf{v}}$					80% of	90%					
Site	Site Name	Pollutant	Period	2013	2014	2015	2016	2017	X	S	t	n	NAAQS	NAAQS	Confidence Interval	Pass			
12 021 0084	Desselle	col	8-hr	0.9	1.1	1.2	1.7	1.4	1.26	0.30	2.13	5	9	7.2	1.55	Yes			
12-031-0084	Rosselle	0.	CO <sup>1</sup>	0.	0.	1-hr	1.2	1.6	1.7	4	2.6	2.22	1.12	2.13	5	35	28	3.29	Yes
12-031-0097	Fort Caroline	$SO_2$	1-hr	21	21	23	18	14	19.40	3.51	2.13	5	75	60	22.74	Yes			
12 102 1000	Condex Long	DM	Annual	6.6	6.6	6.5	6.5	6.6	6.56	0.05	2.13	5	12	9.6	6.61	Yes			
12-103-1009	Sandy Lane	PM <sub>2.5</sub>	24-hr	19	17	16	14	16	16.40	1.82	2.13	5	35	28	18.13	Yes			
12-103-3004	County Motorpool	$PM_{10}^{1}$	24-hr	36	35	42	31	48	38.40	6.66	2.13	5	150	120	44.74	Yes			

 Table 3.3 40 CFR Part 58.14(c) and Ambient Air Monitoring Network Assessment Guidance Calculations

<sup>1</sup> The 1<sup>st</sup> highest concentration for each year was used in probability calculation.

# **B. Site Relocations**

#### <u>Broward County – Pompano Highlands Site</u>

DEP is requesting approval to relocate the Pompano Highlands Site (AQS Site #: 12-011-2003) in Broward County due to continuing issues with meeting the siting requirements, per 40 CFR Part 58, Appendix E, and the current site shelter being beyond repair. A new shelter will be constructed on the same property, approximately 8.25 meters from the current location, and engineered to withstand a Category 4 Hurricane. Site Review information is presented in Table 3.4 and any other pertinent site information is provided in Appendix A.

	Pompano Highlands Site
AQS Site #	12-011-2003
City (CBSA)	Pompano Beach (Miami-Fort Lauderdale-Palm Beach)
Site Name	Pompano Highlands Site
Statement of Purpose	Relied on for Spatial Coverage (O <sub>3</sub> ), Interpolation (PM <sub>2.5</sub> )
Site Review Date	4/24/2018
County	Broward
Location Latitude	26.290765 N
Location Longitude	-80.096665 W
Address	1951 N.E. 48 Street
Objective	Population Exposure (O <sub>3</sub> ), Highest Concentration (PM <sub>2.5</sub> )
Pollutants Monitored	Ozone and PM <sub>2.5</sub>
Sampling and Analysis Method	Ozone: Thermo 49i, UV Photometry; PM <sub>2.5:</sub> TEI 2025, Gravimetric Analysis
Spatial Scale	Neighborhood
Operating Schedule	Continuous (O <sub>3</sub> ) and 1-in-3-day (PM <sub>2.5</sub> )
Network Type	Ozone: SLAMS; PM <sub>2.5</sub> : SLAMS
Distance from Inlet to nearest:	Tree Dripline = $O_3$ : 7 meters, $PM_{2.5}$ : 12 meters Road = $O_3$ : 58 meters, $PM_{2.5}$ : 56 meters Wall = NA
Access	Unlimited
Owner of Land	Broward County
Other Monitored Parameters	NA
Inlet Height	O <sub>3</sub> : 3.8 meters, PM <sub>2.5</sub> : 2.6 meters
Comments	<ul> <li>Site relocation expected by July 1, 2018.</li> <li>The estimated specifications for the new shelter:</li> <li>Coordinates: 26.290833 N, -80.096667 W.</li> <li>Distance to nearest Tree: O<sub>3</sub>: 15.25 meters, PM<sub>2.5</sub>: 20.25 meters</li> </ul>

Table 3.4 Pompano Highlands - AQS Site # 12-011-2003

## Broward County – Dr. Von D. Mizell-Eula Johnson State Park Site

DEP is requesting approval to relocate the Dr. Von D. Mizell-Eula Johnson State Park Site (AQS Site #: 12-011-8002) in Broward County due to continuing issues with meeting the siting requirements, per 40 CFR Part 58, Appendix E, and the current site shelter being beyond repair. A new shelter will be constructed on the same property, approximately 4.52 meters from the current location, and engineered to withstand a Category 4 Hurricane. Site Review information is presented in Table 3.5 and any other pertinent site information is provided in Appendix A.

	Dr. Von D. Mizell-Eula Johnson State Park Site
AQS Site #	12-011-8002
City (CBSA)	Dania Beach (Miami-Fort Lauderdale-Palm Beach)
Site Name	Dr. Von D. Mizell-Eula Johnson State Park Site
Statement of Purpose	Needed by Regulation (O <sub>3</sub> ), Community-wide Monitoring (NO <sub>2</sub> )
Site Review Date	1/09/2018
County	Broward
Location Latitude	26.087198 N
Location Longitude	-80.111415 W
Address	7000 N. Ocean Drive
Objective	Highest Concentration (O <sub>3</sub> ), Population Exposure (NO <sub>2</sub> )
Pollutants Monitored	Ozone and NO <sub>2</sub>
Sampling and Analysis Method	Ozone: Thermo 49i, UV Photometry; NO <sub>2:</sub> Thermo 42i, Chemiluminescence
Spatial Scale	Neighborhood
Operating Schedule	Continuous
Network Type	Ozone: SLAMS; NO <sub>2</sub> : SLAMS
Distance from Inlet to nearest:	Tree Dripline = $O_3$ : 7 meters, $NO_2$ : 8 meters Road = $O_3$ : 8.15 meters, $NO_2$ : 9.60 meters Wall = NA
Access	Unlimited
Owner of Land	State of Florida
Other Monitored Parameters	NA
Inlet Height	O <sub>3</sub> : 3.8 meters, NO <sub>2</sub> : 3.5 meters
Comments	<ul> <li>Site relocation expected by July 1, 2018.</li> <li>The estimated specifications for the new shelter:</li> <li>Coordinates: 26.088056 N, -80.111389W.</li> <li>Distance to nearest Tree: O<sub>3</sub>: 11.52 meters, PM<sub>2.5</sub>: 12.52 meters</li> </ul>

Table 3.5 Pompano Hi	ghlands - AOS	Site # 12-011-2003

# **3.2 MONITOR MODIFICATIONS AND DISCONTINUATIONS**

# A. Monitor Closures, Additions and Modifications

Throughout the last 18 months, there have been few monitor changes, including additions, closures and relocations. A summary of these changes is noted in Table 3.6, below.

AQS Site #	Site Name	Monitor Type	Pollutant	Modification	Comments
12-011-0034	Daniela Banu (NCore Site)	SLAMS	PM <sub>10</sub> REPLACED BY FEM         FRM monitors a FEM eBAMS+		Primary and Collocated FRM monitors replaced by FEM eBAMS+ on 1/1/2018. SD 12/31/2017
		SLAMS	PM <sub>10</sub>	ADD	SU 1/1/2018; FEM eBAMS+
12-011-5005	Coconut Creek	SLAMS	PM10	REPLACED BY FEM	FRM monitor replaced by FEM eBAMS+ on 1/1/2018. SD 12/31/2017
	CIECK	SLAMS	$PM_{10}$	ADD	SU 1/1/2018; FEM eBAMS+
12-086-0019	Pennsuco	SLAMS	SO <sub>2</sub>	MONITORING OBJECTIVE CHANGE	Monitoring Objective change from Source to Population Exposure. This is based on an EPA TSA Recommendation due to consistently low concentrations.
		SPM	СО	CLOSE	SD Expected: 7/1/2018
12-086-0034	Kendall	SPM	Continuous PM <sub>2.5</sub>	ADD	TEOM monitor will be added to address community concerns.
		SLAMS	PM <sub>10</sub>	REPLACED BY FEM	Primary and Collocated FRM monitors replaced by FEM T640X. SD Expected 7/1/2018.
12-086-1016	Miami Fire	SLAMS	PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640X. SD Expected 7/1/2018.
	Station	SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640X. SD Expected 7/1/2018.
		SLAMS	Continuous PM <sub>2.5</sub> and PM <sub>10</sub>	ADD	SU 4/1/2018; FEM T640X
12-103-0004	St. Petersburg College	SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU Expected 1/1/2019; FEM T640
		SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640X. SD Expected 11/29/2017.
12-103-0018	Azalea Park	SLAMS	PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640X. SD Expected 7/1/2018.
		SLAMS	$\begin{array}{c} Continuous \\ PM_{2.5} \text{ and} \\ PM_{10} \end{array}$	ADD	SU 1/1/2018; FEM T640X

Table 3.6 PQAO Monitor Modifications and Discontinuations

12-103-3004	County Motorpool	SLAMS	PM <sub>10</sub>	CLOSE	Collocated monitor; Expected SD 07/1/2018. Monitor meets all requirements for removal per Section 4.1 of the AAMNAG. Collocation requirement still met. See Tables 3.2 and 3.3 above.
12-031-0032	Kooker Park	SPM	PM <sub>2.5</sub>	REPLACED BY CONTINUOUS MONITOR	TEOM monitor will be used to address community concerns.
12-031-0108	Pepsi Place	SLAMS	<b>PM</b> <sub>10</sub>	ADD/RELOCA TION	SU Expected 7/1/2018; Relocation from Rosselle.
12-117-1002	Sanford	SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU 1/1/2018; FEM T640
		SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640. SD 3/31/2018.
12-115-0013	Bee Ridge	SLAMS	PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640. SD Expected 7/1/2018.
		SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU 1/4/2018; FEM T640
		SLAMS	PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640. SD Expected 7/1/2018.
12-071-0005	Winkler Pump Station	SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640. SD 8/3/2017.
		SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU 1/1/2018; FEM T640
	Baptist	SLAMS	PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640. SD Expected 7/1/2018.
12-105-6006	Children's Home	SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640. SD 1/9/2017.
		SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU 1/1/2018; FEM T640
	Daytona –		PM <sub>2.5</sub>	REPLACED BY FEM	Primary FRM monitor replaced by FEM T640. SD Expected 7/1/2018.
12-127-5002	Blind Services	SPM	Continuous PM <sub>2.5</sub>	REPLACED BY FEM	TEOM monitor replaced by FEM T640. SD 9/19/2017.
		SLAMS	Continuous PM <sub>2.5</sub>	ADD	SU 1/1/2018; FEM T640
12-033-0004	Ellyson Industrial Park	SPM	Continuous PM <sub>2.5</sub>	CLOSE	TEOM monitor closed, SD 9/19/2017.

# **B.** PM<sub>2.5</sub> Operating Schedule Changes

DEP is requesting EPA's approval to change the operating schedule of three of its  $PM_{2.5}$  FRM monitors, which run on a daily schedule to a 1-in-3-day schedule. In accordance with 40 CFR Part 58 Subpart B 58.12 (d) (1) (iii), Florida's PQAO does not have  $PM_{2.5}$  FRM monitors that are within ±5 percent of the 24-hour  $PM_{2.5}$  NAAQS; thus, it is not a federal requirement to operate  $PM_{2.5}$  FRM monitors on a daily schedule. EPA provided verbal approval for this change and the operating schedules were reduced on April 1, 2018. Table 3.7 lists the operating schedule changes of the monitors DEP proposes to modify.

AQS Site #	Site Name	Pollutant	Operating Schedule Change
12-011-0034	Daniela Banu (NCore Site)	PM <sub>2.5</sub>	Daily to 1-in-3-day
12-011-5005	Coconut Creek	PM <sub>2.5</sub>	Daily to 1-in-3-day
12-057-3002	Sydney (NCore Site)	PM <sub>2.5</sub>	Daily to 1-in-3-day

# 4.0 FLORIDA'S AMBIENT AIR MONITORING NETWORK 2018

The Ambient Air Monitoring Section in Florida is responsible for measuring levels of regulated pollutants in the ambient air by maintaining a network of 97 monitoring stations across the state and measuring the concentration of pollutants such as ozone, lead, particles (dust), nitrogen oxides, sulfur dioxide and carbon monoxide. These monitoring services are provided in accordance with EPA regulatory requirements. The criteria pollutant monitoring system is designed to make measurements to assess compliance with the national ambient air quality standards (NAAQS) as set by the EPA. The NAAQS define air pollutant concentration levels judged necessary to protect the public health and welfare. This section provides details of each pollutant network within Florida's ambient air monitoring network, if all requests in this plan are granted.

### 4.1 OZONE NETWORK

Florida's PQAO operates an extensive ozone network covering the state from large urban areas to smaller rural areas totaling 56 monitoring sites. This network enables the state of Florida to learn how ozone is transported to and within the state, to identify the parts of the state with peak ozone concentrations, and to determine where ozone concentrations do and do not exceed the NAAQS. Table 4.1 lists all ozone monitoring stations within the state and their 2015-2017 design values.

AQS Site #	Site Name	Pollutant	2015-2017 Design Values
12-001-3012	Paynes Prairie Farm	Ozone	59
12-003-0002	Osceola National Forest - Olustee Ranger Station	Ozone	60
12-005-0006	St. Andrews State Park	Ozone	60
12-009-0007	Melbourne	Ozone	59
12-009-4001	Cocoa Beach	Ozone	60
12-011-0033	Vista View Park	Ozone	Not Available - Data Completeness
12-011-0034	Daniela Banu (NCore Site)	Ozone	Not Available - Site opened in 2015
12-011-2003	Pompano Highland Fire House	Ozone	61
12-011-8002	Dr. Von Mizell-Eula Johnson State Park	Ozone	62
12-021-0004	Laurel Oak Elementary	Ozone	59
12-023-0002	Lake City - Veterans Domicile	Ozone	60
12-031-0077	Sheffield Elementary	Ozone	Not Available - Data Completeness
12-031-0100	Mayo Clinic	Ozone	Not Available - Data Completeness
12-031-0106	Cisco Drive	Ozone	Not Available - Data Completeness
12-033-0004	Ellyson Industrial Park	Ozone	63
12-033-0018	Pensacola NAS	Ozone	62
12-035-0004	Flagler	Ozone	59
12-055-0003	Archbold Biological Station	Ozone	60
12-057-0081	E.G. Simmons Park	Ozone	67
12-057-1035	Davis Island (Coast Guard Station)	Ozone	67
12-057-1065	USMC Reserve Center	Ozone	66
12-057-3002	Sydney (NCore Site)	Ozone	67
12-059-0004	Bonifay Tri-County Airport	Ozone	58
12-069-0002	Clermont	Ozone	63
12-071-2002	Rotary Park	Ozone	59
12-071-3002	Bay Oaks Park	Ozone	60
12-073-0012	Tallahassee Community College	Ozone	61

#### Table 4.1 Florida's Ozone Network

12-081-3002	Port Manatee	Ozone	61
12-081-3002			63
12-081-4012	GT Bray Park	Ozone	60
	39th Street Park	Ozone	
12-083-0003	Ocala - YMCA	Ozone	61
12-083-0004	Marion County Sheriff	Ozone	58
12-085-0007	Stuart	Ozone	61
12-086-0027	Rosenstiel (University of Miami)	Ozone	63
12-086-0029	Perdue	Ozone	61
12-091-0002	Fort Walton Beach	Ozone	60
12-095-0008	Winegard Elementary School	Ozone	64
12-095-2002	Lake Isle Estates - Winter Park	Ozone	63
12-097-2002	Osceola Co. Fire Station - Four	Ozone	64
12-097-2002	Corners	Ozofie	04
12-099-0021	Lantana Preserve	Ozone	61
12-099-0022	Lamstein Lane	Ozona	Not Available - Site expected to
12-099-0022		Ozone	open 7/2019
12-101-0005	San Antonio	Ozone	61
12-101-2001	Holiday	Ozone	61
12-103-0004	St. Petersburg College	Ozone	62
12-103-0018	Azalea Park	Ozone	60
12-103-5002	John Chesnut Sr. Park - East Lake	Ozone	59
12-105-6005	Sikes Elementary School	Ozone	66
12-105-6006	Baptist Children's Home	Ozone	65
12-111-0013	Savannas	Ozone	61
12-113-0015	Woodlawn Beach Middle School	Ozone	61
12-115-1005	Lido Park	Ozone	63
12-115-1006	Paw Park	Ozone	63
12-115-2002	Jackson Road	Ozone	61
12-117-1002	Seminole Community College	Ozone	63
12-127-5002	Daytona - Blind Services	Ozone	59
12-129-0001	St. Marks Wildlife Refuge (NCore Site)	Ozone	59

# 4.2 PM<sub>2.5</sub> NETWORK

### • <u>*The Federal Reference Method and Federal Equivalent Method Network*</u>

Florida's PQAO currently operates 13 federal reference method (FRM) and 17 federal equivalent method (FEM) monitors. There is an approved waiver for the FEM Met One BAM 1020 instruments operating in Palm Beach County to remain non-regulatory monitors since they do not meet the required FEM statistics in 40 CFR Part 53(C). The 16 other FEM monitors have been approved by the EPA and can be used to determine compliance with the NAAQS. This network is sufficient to protect the health and welfare of Florida's residents and environment. It also provides information on how fine particles are transported to and within the state, to identify the parts of the state with the highest concentrations of fine particles, and to determine where fine particle concentrations do and do not exceed the NAAQS. All of Florida's PM<sub>2.5</sub> monitoring sites, with valid design values for 2015-2017, are less than 80 percent of the annual standard (9.6  $\mu$ g/m<sup>3</sup>) as detailed in Table 4.2.

AQS Site #	Site Name	Pollutant	Method: FRM/FEM	Operating Schedule	2015-2017 Design Values	Comments
12-001-0023	Millhonnor	PM <sub>2.5</sub>	FRM	Every 3rd Day	6.1	
12-001-0023	Millhopper	PIN12.5	FRM	Every 12th Day	0.1	Collocated monitor
12-009-0007	Melbourne	PM <sub>2.5</sub>	FRM	Every 3rd Day	5.7	
			FRM	Daily		
12-011-0034	Daniela Banu (NCore Site)	PM <sub>2.5</sub>	FRM	Every 12th Day	6.4	Collocated monitor
	(NCOIC SIC)		FEM	Continuous		
12-011-0035	Fort Lauderdale Near Road	PM <sub>2.5</sub>	FEM	Continuous	Not Available – Site opened in 2015	
12-011-2003	Pompano Highland Fire House	PM <sub>2.5</sub>	FRM	Every 3rd Day	6.6	
12-011-5005	Coconut Creek	PM <sub>2.5</sub>	FRM	Daily	6.1	
12-031-0098	Mandarin Rd Site	PM <sub>2.5</sub>	FRM	Daily	Not Available – Data Completeness	
			FRM	Daily		
12-031-0099	Sunny Acres	PM <sub>2.5</sub>	FRM	Every 12th Day	7.2	Collocated monitor
12-031-0108	Pepsi Place (PP-PPL)	PM <sub>2.5</sub>	FEM	Continuous	Not Available – Data Completeness	
12 022 0004	Ellyson		FRM	Every 3rd Day	7.4	
12-033-0004	Industrial Park	PM <sub>2.5</sub>	FRM	Every 12th Day	7.4	Collocated monitor

#### Table 4.2 Florida's PM2.5 Network

12-057-0112	Munro Street	PM <sub>2.5</sub>	FEM	Continuous	Not Available – Site opened in 2016	
			FRM	Daily		
12-057-3002	Sydney (NCore Site)	PM <sub>2.5</sub>	FRM	Every 12th Day	8	Collocated monitor
			FEM	Continuous		
12-071-0005	Winkler Pump Station	PM <sub>2.5</sub>	FEM	Continuous	6.1	
	Tallahassee		FRM	Every 3rd		
12-073-0012	Community College	PM <sub>2.5</sub>	FRM	Day Every 12th Day	7.4	Collocated monitor
12-086-0033	Palm Springs Fire Station	PM <sub>2.5</sub>	FRM	Every 3rd Day	6.6	
	Miami Fire		FEM	Continuous		
12-086-1016	Station	PM <sub>2.5</sub>	FRM	Every 12th Day	7.5	Collocated monitor
12-086-6001	Homestead Fire Station	PM <sub>2.5</sub>	FRM	Daily	6.6	
12-095-0009	I-4 Near Road	PM <sub>2.5</sub>	FEM	Continuous	Not Available – Site has a temporary monitoring waiver	
12-095-2002	Lake Isle Estates - Winter Park	PM <sub>2.5</sub>	FEM	Continuous	7.1	
12-099-0008	Belle Glade	PM <sub>2.5</sub>	FEM	Continuous	Non- regulatory Monitor	
			FEM	Continuous	Not Available	
12-099-0022	Lamstein Lane	PM <sub>2.5</sub>	FEM	Continuous	– Site expected to open 7/2019	Collocated monitor
12-099-2005	Delray Beach	PM <sub>2.5</sub>	FRM	Every 3rd Day	6	
12-103-0018	Azalea Park	PM <sub>2.5</sub>	FEM	Continuous	7.1	
12-105-6006	Baptist Children's Home	PM <sub>2.5</sub>	FEM	Continuous	6.5	
12-115-0013	Bee Ridge Park	PM <sub>2.5</sub>	FEM	Continuous	6.4	
			FEM	Continuous		
12-117-1002	Sanford	PM <sub>2.5</sub>	FRM	Every 12th Day	5.9	Collocated monitor
12-127-5002	Daytona - Blind Services	PM <sub>2.5</sub>	FEM	Continuous	6.1	

# **4.3 NCORE NETWORK**

The National Core (NCore) monitoring network is designed to be approximately 80 sites nationwide, with the intent to have a network made of largely population-oriented sites and some rural sites that take advantage of multi-pollutant monitoring. Details of the NCore network are provided on EPA's website at <u>www3.epa.gov/ttn/amtic/ncore.html</u>. Table 4.3 provides information on Florida's NCore sites.

AQS Site #	Site Name	Parameter
12-129-0001	St. Marks National Wildlife Refuge	O <sub>3</sub> , NO <sub>y</sub> , CO, SO <sub>2</sub> _TL, Continuous PM <sub>2.5</sub>
12-011-0034	Daniela Banu	O <sub>3</sub> , NO <sub>y</sub> _TL, NO <sub>z</sub> _TL, NO_TL, CO_TL, SO <sub>2</sub> _TL, Continuous PM <sub>2.5</sub> , PM <sub>10-2.5</sub> , Low Volume PM <sub>10</sub> , PM <sub>10</sub> and PM <sub>2.5</sub>
12-057-3002	Sydney	O <sub>3</sub> , NO <sub>y</sub> _TL, NO <sub>z</sub> _TL, NO_TL, CO_TL, SO <sub>2</sub> _TL, Continuous PM <sub>2.5</sub> , PM <sub>10-2.5</sub> , Low Volume PM <sub>10</sub> , PM <sub>10</sub> and PM <sub>2.5</sub>

Table 4.3 NCore Sites in Florida

EPA only requires two NCore monitoring sites for the State of Florida, but the PQAO currently operates three sites. EPA requested that DEP operate a rural NCore site at the St. Marks National Wildlife Refuge to enhance the coverage for the southeastern United States. The St. Marks National Wildlife Refuge site (AQS Site #12-129-0001) takes advantage of the existing Interagency Monitoring of Protected Visual Environments (IMPROVE) and DEP monitoring for particulate matter and ozone, respectively.

Building on the Speciation Trends Network (STN), the two required NCore sites are located in the largest Metropolitan Statistical Areas in the state - the Miami-Fort Lauderdale-Miami Beach area (more than 6 million) and Tampa-St. Petersburg-Clearwater area (more than 2 million). The site in the Miami-Fort Lauderdale-Miami Beach area was relocated due to the construction plans for a source that would influence the site. The replacement site for the Miami-Fort Lauderdale-Miami Beach area is AQS Site #12-011-0034 in Davie, which is operated by Broward County. The site began operation in August 2015 and the meteorological instruments will be operational in the summer of 2017.

In the Tampa-St. Petersburg-Clearwater area, the NCore site is Sydney (AQS Site #12-057-3002), which is operated by Hillsborough County. This site was used as part of a large and intense nitrogen deposition study called the Bay Regional Atmospheric Chemistry Experiment (BRACE). It has also been monitoring trace  $SO_2$ , CO and total reactive nitrogen (NO<sub>y</sub>) since 2004. Since the primary use of the NCore sites is to obtain air quality trends analyses, Sydney's location in a more rural part of the county is ideal for tracking trends that reflect the increasing population.

# 4.4 PAMS NETWORK

The NCore sites in Metropolitan Statistical Areas with populations over one million will be required to incorporate Photochemical Assessment Monitoring Station (PAMS) under 40 CFR part 58, Appendix D, section 5(a), no later than June 1, 2019. The PAMS measurements include:

- 1. Hourly averaged speciated volatile organic compounds (VOCs);
- 2. Three eight-hour averaged carbonyl samples per day on a 1 in 3-day schedule, or hourly averaged formaldehyde;
- 3. Hourly averaged O<sub>3</sub>;
- 4. Hourly averaged nitrogen oxide (NO), true nitrogen dioxide (NO<sub>2</sub>), and total reactive nitrogen (NO<sub>y</sub>);
- 5. Hourly averaged ambient temperature;
- 6. Hourly vector-averaged wind direction;
- 7. Hourly vector-averaged wind speed;
- 8. Hourly average atmospheric pressure;
- 9. Hourly averaged relative humidity;
- 10. Hourly precipitation;
- 11. Hourly averaged mixing-height;
- 12. Hourly averaged solar radiation; and
- 13. Hourly averaged ultraviolet radiation.

The Daniela Banu (AQS Site #12-011-0034) and Sydney (AQS Site #12-057-3002) NCore sites located in Broward and Hillsborough counties, respectively, will be required to implement PAMS monitoring. Prior to the implementation in 2019, the Broward and Hillsborough counties will become a separate Primary Quality Assurance Organization (PQAO) for the PAMS network. The PAMS Implementation Network Plan for each county is provided below.

PAMS Monitoring Implementation Network Plan
Monitoring Organizations Required To Operate At NCore Sites
Environmental Protection and Growth Management Department, Environmental Engineering and Permitting Division, Air Monitoring and Outreach Section, Broward County, Florida
The recently revised monitoring rule (80 FR 65292; October 26, 2015) requires PAMS measurements June 1 through August 31 at NCore sites that are located in Core-Based Statistical Areas (CBSAs) with populations of 1,000,000 or more. Therefore, Broward County's Air Monitoring and Outreach Section proposes to implement PAMS monitoring in the FY2019 network plan.
Network Decision
The NCore site located at the Banu air monitoring station (12-011-0034) will serve as the location of the required PAMS site and will measure the following parameters described below. An Inventory of equipment used at the site is provided in Table 2.
We request a waiver from implementing PAMS at an otherwise required NCore site entirely, or to make PAMS measurements at alternative locations such as existing PAMS sites or existing NATTS sites. Rationale for this waiver is provided in Waiver attachment
Auto GC Decision
Volatile organic compounds (VOCs) – A complete list of the targeted compounds are found in Table 1.
We will measure hourly speciated VOC measurements with an auto-gas chromatograph (GC) using CAS AutoGC.
We request a waiver to allow three 8-hour samples every third day as an alternative to daily hourly speciated VOC measurements at locations <i>(insert locations)</i> . Rationale for this waiver is provided in Waiver Attachment
Meteorology Measurements Decision – Note: EPA is suggesting the use of ceilometers for determining mixing height, however other types of meteorological equipment that provide for an indication of mixing height can be proposed
Will measure wind direction, wind speed, temperature, humidity, atmospheric pressure, precipitation, solar radiation, ultraviolet radiation, and mixing height. We have elected to use the following instrumentation to measure the parameters described above <i>(See Table 2)</i> .
We request a waiver to allow meteorological measurements to be obtained from other nearby sites. Rationale for this waiver is provided in Waiver attachment
Other Required Measurements
<ul> <li>Carbonyls - Carbonyl sampling at a frequency of three 8-hour samples on a one-in-three day basis (~90 samples per PAMS sampling season) using an ATECH 8000. A complete list of the target</li> </ul>

carbonyl compounds may be found in Table 1. The TO-11A test method, as used in the National Air Toxics Trends (NATTS) program<sup>1</sup> will be used.

Nitrogen Oxides – Will monitor for NO and NO<sub>y</sub> (total oxides of nitrogen) in addition to true NO<sub>2</sub>. The true NO<sub>2</sub> is required to be measured with a direct reading NO<sub>2</sub> analyzer, cavity attenuated phase shift (CAPS) spectroscopy or photolytic-converter NO<sub>x</sub> analyzer. We have elected to use the Teledyne-API T500 CAPS Analyzer for the true NO2 measurement. NO and NOy will be measured using a Thermo Environmental Instruments Model 42i-Y analyzer.

	Duionity Com	da	Ontional Compounds				
Priority Compounds				Optional Compounds			inus
1	1,2,3- trimethylbenzene <sup>a</sup>	19	n-hexane <sup>b</sup>	1	1,3,5-trimethylbenzene	19	m-diethlybenzene
	1,2,4-			2		20	
2	trimethylbenzene <sup>a</sup>	20	n-pentane		1-pentene		methylcyclohexane
				3		21	methylcyclopentan
3	1-butene	21	o-ethyltoluene <sup>a</sup>		2,2-dimethylbutane		e
	2,2,4-trimethylpentane			4		22	
4	b	22	o-xylene <sup>a,b</sup>		2,3,4-trimethylpentane		n-decane
5	acetaldehyde b,c	23	p-ethyltoluene <sup>a</sup>	5	2,3-dimethylbutane	23	n-heptane
6	acetone c,d	24	Propane	6	2,3-dimethylpentane	24	n-nonane
7	benzene <sup>a,b</sup>	25	propylene	7	2,4-dimethylpentane	25	n-octane
8	c-2-butene	26	styrene <sup>a,b</sup>	8	2-methylheptane	26	n-propylbenzene <sup>a</sup>
9	ethane <sup>d</sup>	27	toluene a,b	9	2-methylhexane	27	n-undecane
10	ethylbenzene a,b	28	t-2-butene	10	2-methylpentane	28	p-diethylbenzene
11	Ethylene			11	3-methylheptane	29	t-2-pentene
12	formaldehyde b,c			12	3-methylhexane	30	α/β-pinene
13	Isobutane			13	3-methylpentane	31	1,3 butadiene <sup>b</sup>
14	Isopentane			14	Acetylene	32	benzaldehyde °
				15		33	carbon
15	Isoprene				c-2-pentene		tetrachloride b
16	m&p-xylenes <sup>a,b</sup>			16	cyclohexane	34	Ethanol
				17		35	Tetrachloroethylen
17	m-ethyltoluene <sup>a</sup>				cyclopentane		eb
18	n-butane			18	isopropylbenzene <sup>b</sup>		

Table 1 PAMS Target Compound List

Source: Revisions to the Photochemical Assessment Monitoring Stations Compound Target List. U.S. EPA, November 20, 2013

<sup>a</sup> Important SOAP (Secondary Organic Aerosols Precursor) Compounds

<sup>b</sup>HAP (Hazardous Air Pollutant) Compounds

<sup>c</sup> Carbonyl compounds

<sup>d</sup>Non-reactive compounds, not considered to be VOC for regulatory purposes

<sup>1</sup> See NATTS Technical Assistance Document for TO-11A method.

	1 1	-	
Instrument	Manufacturer	Model	Status
Trace-level CO Analyzer	TEI	48C-TLE	Active
Trace-level SO <sub>2</sub> Analyzer	TEI	43i-TLE	Active
Ozone Analyzer	TEI	49i	Active
Trace-level NO/NOy Analyzer	TEI	42i-TLE	Active
24-hour VOC Canister Sampling	Entech	SUMMA	Active
24-hour VOC Canister Sampling	ATEC	2200-22	Pending
PM <sub>2.5</sub> Speciation	MetOne	SASS	Active
Organic Carbon/Elemental Carbon	URG	3000N	Active
Low-Volume PM <sub>2.5</sub> Mass	TEI	2025i	Active
Low-Volume PM <sub>2.5-10</sub> Mass	TEI	2025i	Active
Low-Volume PM <sub>10</sub> Mass	TEI	2025i	Active
Continuous PM <sub>2.5</sub> Mass	TEI	5014i	Active
Ultrasonic Anemometer	R.M. Young	81000	Active
Data Acquisition System	Agilaire	8832	Active
Data Acquisition System	Agilaire	8872	Pending
AutoGC System	CAS	-	Pending
3-hour Carbonyl Sampler	ATECH	8000	Pending
True NO <sub>2</sub> Analyzer	T-API	T500	Pending
Mixing Height Monitor	TBD	-	Pending
UV/Solar Radiation Monitor	TBD	-	Pending
Precipitation Gauge	TBD	-	Pending
Atmospheric Pressure Gauge	TBD	-	Pending

Table 2: Banu Station Equipment Inventory

\*TBD = to be determined

	Monitoring Organizations Required To Operate At NCore Sites
	Environmental Protection Commission of Hillsborough County, Florida
June popul	ecently revised monitoring rule (80 FR 65292; October 26, 2015) requires PAMS measurements I through August 31 at NCore sites that are located in Core-Based Statistical Areas (CBSAs) with ations of 1,000,000 or more. Therefore, the Environmental Protection Commission of Hillsborough ty, Florida (EPC/HC) proposes to implement PAMS monitoring in the FY2017 network plan.
Netw	ork Decision
5	The NCore site located at the Sydney air monitoring station (12-057-3002) will serve as the location of the required PAMS site and will measure the following parameters described below. An Inventory of equipment used at the site is provided in Table 2.
C	We request a waiver from implementing PAMS at an otherwise required NCore site entirely, or make PAMS measurements at alternative locations such as existing PAMS sites or existing NATTS sites. Rationale for this waiver is provided in Waiver attachment
Auto	GC Decision
Volat	ile organic compounds (VOCs) – A complete list of the targeted compounds are found in Table 1
	We will measure hourly speciated VOC measurements with an auto-gas chromatograph (GC) using Markes-Agilent AutoGC.
C	We request a waiver to allow three 8-hour samples every third day as an alternative to daily hourly speciated VOC measurements at locations <i>(insert locations)</i> . Rationale for this waiver is provided in Waiver Attachment
deter	orology Measurements Decision – Note: EPA is suggesting the use of ceilometers for mining mixing height, however other types of meteorological equipment that provide for an ation of mixing height can be proposed
	Will measure wind direction, wind speed, temperature, humidity, atmospheric pressure, precipitation, solar radiation, ultraviolet radiation, and mixing height. We have elected to use the following instrumentation to measure the parameters described above (See Table 2).
[	We request a waiver to allow meteorological measurements to be obtained from other nearby sites. Rationale for this waiver is provided in Waiver attachment
Othe	r Required Measurements
0	Carbonyls - Carbonyl sampling at a frequency of three 8-hour samples on a one-in-three day bas (~90 samples per PAMS sampling season) using an ATECH 8000. A complete list of the target

carbonyl compounds may be found in Table 1. The TO-11A test method, as used in the National Air Toxics Trends (NATTS) program<sup>1</sup> will be used.

Nitrogen Oxides – Will monitor for NO and NO<sub>y</sub> (total oxides of nitrogen) in addition to true NO<sub>2</sub>. The true NO<sub>2</sub> is required to be measured with a direct reading NO<sub>2</sub> analyzer, cavity attenuated phase shift (CAPS) spectroscopy or photolytic-converter NO<sub>x</sub> analyzer. We have elected to use the Teledyne-API T500 CAPS Analyzer for the true NO2 measurement. NO and NOy will be measured using a Thermo Environmental Instruments Model 42i-Y analyzer.

	<b>D</b> 4 4 6								
	Priority Compounds				Optional Compounds				
	1,2,3-			1		19			
1	trimethylbenzene <sup>a</sup>	19	n-hexane <sup>b</sup>		1,3,5-trimethylbenzene		m-diethlybenzene		
	1,2,4-			2		20			
2	trimethylbenzene <sup>a</sup>	20	n-pentane		1-pentene		methylcyclohexane		
				3		21	methylcyclopentan		
3	1-butene	21	o-ethyltoluene <sup>a</sup>		2,2-dimethylbutane		e		
	2,2,4-trimethylpentane			4		22			
4	b	22	o-xylene <sup>a,b</sup>		2,3,4-trimethylpentane		n-decane		
5	acetaldehyde b,c	23	p-ethyltoluene <sup>a</sup>	5	2,3-dimethylbutane	23	n-heptane		
6	acetone c,d	24	Propane	6	2,3-dimethylpentane	24	n-nonane		
7	benzene <sup>a,b</sup>	25	propylene	7	2,4-dimethylpentane	25	n-octane		
8	c-2-butene	26	styrene <sup>a,b</sup>	8	2-methylheptane	26	n-propylbenzene <sup>a</sup>		
9	ethane <sup>d</sup>	27	toluene <sup>a,b</sup>	9	2-methylhexane	27	n-undecane		
10	ethylbenzene <sup>a,b</sup>	28	t-2-butene	10	2-methylpentane	28	p-diethylbenzene		
11	Ethylene			11	3-methylheptane	29	t-2-pentene		
12	formaldehyde b,c			12	3-methylhexane	30	α/β-pinene		
13	Isobutane			13	3-methylpentane	31	1,3 butadiene <sup>b</sup>		
14	Isopentane	]		14	Acetylene	32	benzaldehyde °		
				15		33	carbon		
15	Isoprene				c-2-pentene		tetrachloride b		
16	m&p-xylenes <sup>a,b</sup>			16	cyclohexane	34	Ethanol		
				17		35	Tetrachloroethylen		
17	m-ethyltoluene <sup>a</sup>				cyclopentane		e <sup>b</sup>		
18	n-butane			18	isopropylbenzene <sup>b</sup>				

Table 1 PAMS Target Compound List

Source: Revisions to the Photochemical Assessment Monitoring Stations Compound Target List. U.S. EPA, November 20, 2013

<sup>a</sup> Important SOAP (Secondary Organic Aerosols Precursor) Compounds

<sup>b</sup>HAP (Hazardous Air Pollutant) Compounds

<sup>c</sup>Carbonyl compounds

<sup>d</sup>Non-reactive compounds, not considered to be VOC for regulatory purposes

<sup>&</sup>lt;sup>1</sup> See NATTS Technical Assistance Document for TO-11A method.

Instrument	Manufacturer	Model	Status
Trace-level CO Analyzer	TEI	48i-TLE	Active
Trace-level SO <sub>2</sub> Analyzer	TEI	43i-TLE	Active
Ozone Analyzer	TEI	49i	Active
Trace-level NO/NOy Analyzer	TEI	42i-TLE	Active
24-hour VOC Canister Sampling	Resteck	SUMA	Active
24-hour Carbonyl Sampling	ERG	C Sampling	Active
SVOC/PUF Sampler	General Metals	Hi-VOL	Active
PM <sub>10</sub> Metals	General Metals	Hi-VOL	Active
PM <sub>2.5</sub> Speciation	MetOne	SASS	Active
Organic Carbon/Elemental Carbon	URG	3000N	Active
Low-Volume PM <sub>2.5</sub> Mass	TEI	2025i	Active
Low-Volume PM <sub>2.5-10</sub> Mass	TEI	2025i	Active
Low-Volume PM <sub>10</sub> Mass	TEI	2025i	Active
Continuous PM <sub>2.5</sub> Mass	TEI	5014i	Active
Ultrasonic Anemometer	R.M. Young	81000	Active
Data Acquisition System	Agilaire	8872	Pending
AutoGC System	Markes-Agilent	-	Pending
3-hour Carbonyl Sampler	ATECH	8000	Pending
True NO <sub>2</sub> Analyzer	T-API	T500	Pending
Mixing Height Monitor	TBD	-	Pending
UV/Solar Radiation Monitor	TBD	-	Pending
Precipitation Gauge	TBD	-	Pending
Atmospheric Pressure Gauge	TBD	-	Pending

#### Table 2: Sydney Station Equipment Inventory

\*TBD = to be determined

# 4.5 NATTS NETWORK

The National Air Toxics Trends Station (NATTS) Network was developed to fulfill the need for long-term Hazardous Air Pollutants (HAPs) monitoring data of consistent quality. Among the principle objectives are assessing trends and emission reduction program effectiveness, as well as assessing and verifying air quality models. The current NATTS network configuration includes 27 sites (20 urban, 7 rural) across the United States. There are typically more than 100 pollutants monitored at each NATTS, although only 19 are required. These include VOCs, carbonyls, PM<sub>10</sub> metals, hexavalent chromium and Polycyclic Aromatic Hydrocarbons (PAHs). Table 4.4 lists the NATTS sites in Hillsborough and Pinellas counties. These counties jointly administer funds for the NATTS program. The two NATTS sites in Florida are in the Tampa Bay area: one in Hillsborough County (Sydney: AQS Site #12-057-3002) and the other in Pinellas County (Skyview: AQS Site #12-103-0026).

#### Table 4.4 NATTS Sites in Florida

AQS Site #	Site Name	County	Pollutants
12-103-0026	Skyview	Pinellas	VOCs, Carbonyls, PAHs and Metals
12-057-3002	Sydney (NCore Site)	Hillsborough	VOCs, Carbonyls and Metals

# 4.6 SO<sub>2</sub> MONITORING NETWORK

Florida's air monitoring network complies with current SO<sub>2</sub> monitoring requirements. Ambient monitoring is required for Core Based Statistical Areas (CBSAs) whose Population Weighted Emission Index (PWEI) is above 5,000. One SO<sub>2</sub> monitor is required for CBSAs when the PWEI is above 5,000 and two monitors are required when the PWEI is above 100,000, with a unit of million persons-tons per year. Additionally, one SO<sub>2</sub> monitor is required at each of the NCore sites. A summary of these requirements is provided in Table 4.5. The PWEI values listed were provided by EPA.

Core Based Statistical Areas	Counties	2016 Census Population	PWEI 2014 NEI	SO2 Monitors Needed	SO <sub>2</sub> Monitors Operating
Miami-Fort Lauderdale-Pompano Beach	Broward, Miami-Dade and Palm Beach Counties	6,066,387	57,330.90	1	2
Tampa-St. Petersburg- Clearwater	Hillsborough, Pinellas, Pasco and Hernando Counties	3,032,171	53,888.86	1	5
Orlando-Kissimmee- Sanford	Lake, Orange, Osceola and Seminole Counties	2,441,257	12,785.94	1	1
Jacksonville	Baker, Clay, Duval, Nassau and St. Johns Counties	1,478,212	43,332.37	1	3
North Port-Bradenton- Sarasota	Manatee and Sarasota Counties	788,457	972.87		1
Cape Coral-Fort Myers	Lee County	722,336	436.86		
Lakeland	Polk County	666,149	11,623.42	1	1
Deltona-Daytona Beach-Ormond Beach	Flagler and Volusia Counties	637,674	499.92		
Palm Bay-Melbourne- Titusville	Brevard County	579,130	756.79		
Pensacola-Ferry Pass- Brent	Escambia and Santa Rosa Counties	485,684	2,400.54		1
Port St. Lucie-Fort Pierce	Martin and St Lucie Counties	465,208	1,092.95		
Homosassa Springs	Citrus County	143,621	4,704.14		1
Palatka	alatka Putnam County		997.02		1
Hamilton County	Hamilton County	14,361	36.47		1
NCore sites (3)	N/A	N/A	N/A	3	3
Total				8	20

Table 4.5	SO <sub>2</sub> M	onitoring	Requirements
1 abic 4.5	002111	onneoring	Requirements

AQS Site #	Site Name	Pollutant	Monitoring Purpose
12-011-0034	Daniela Banu (NCore Site)	$SO_2$	Population
12-011-8002	Dr. Von Mizell-Eula Johnson State Park	SO <sub>2</sub>	Population
12-086-0019	Pennsuco	SO <sub>2</sub>	Population
12-057-0112	Apollo Beach	SO <sub>2</sub>	Source
12-057-0109	East Bay	SO <sub>2</sub>	Source
12-057-1035	Davis Island (Coast Guard Station)	SO <sub>2</sub>	Population
12-057-3002	Sydney (NCore Site)	SO <sub>2</sub>	Population
12-103-0023	Derby Lane	SO <sub>2</sub>	Population
12-103-5003	Oakwood	SO <sub>2</sub>	Source
12-031-0032	Kooker Park	SO <sub>2</sub>	Data Trends
12-031-0081	Cedar Bay STP	SO <sub>2</sub>	Source
12-089-0005	Fernandina Beach Waste Water Treatment Plant	SO <sub>2</sub>	Regulatory
12-081-0028	Port Manatee DEP	$SO_2$	Source
12-095-2002	Lake Isle Estates - Winter Park	SO <sub>2</sub>	Regulatory
12-105-6005	Sikes Elementary School	SO <sub>2</sub>	Regulatory
12-033-0004	Ellyson Industrial Park	SO <sub>2</sub>	Population
12-129-0001	St. Marks Wildlife Refuge (NCore Site)	SO <sub>2</sub>	Background
12-107-1008	Palatka Barge Port	SO <sub>2</sub>	Source
12-017-0006	Crystal River Preserve	SO <sub>2</sub>	Source
12-047-0015	White Springs	SO <sub>2</sub>	Source

#### Table 4.6 Florida's SO<sub>2</sub> Network

### 4.7 NO<sub>2</sub> MONITORING NETWORK

 $NO_2$  monitoring requirements include near-road monitoring for CBSAs with a population of over 1 million and over 2.5 million, community-wide monitoring for CBSAs with a population over 1 million, and  $NO_2$  monitoring of vulnerable and susceptible populations. A summary of the  $NO_2$  monitoring requirements is provided in Table 4.7, and the near-road, the designated community-wide and the vulnerable and susceptible monitors for the state are provided in Table 4.8.

#### <u>Near-road NO<sub>2</sub> Monitoring</u>

There were two phases for the implementation of NO<sub>2</sub> Near-road monitoring:

- Phase I: CBSAs with a population over 1 million were required to have at least one NO<sub>2</sub> near-road monitor to be operational by January 1, 2014.
- Phase II: CBSAs with a population over 2.5 million or more are required to operate two NO<sub>2</sub> near-road monitors to be operational by January 1, 2015.

In Florida, these areas are Tampa, Fort Lauderdale, Jacksonville and Orlando. All near-road sites within these areas are currently operational except for the Orlando (Orange County) site. In July of 2017, EPA Region 4 approved a temporary monitoring waiver for the Orange County near-road site, AQS Site # 12-095-0009, due to the ongoing construction which resulted in environmental conditions not representative of the I-4 ambient air.

The secondary near-road NO<sub>2</sub> sites (Phase II) for the Tampa-St. Petersburg-Clearwater (Sawgrass Lake Park: AQS Site #12-103-0027) and Miami-Fort Lauderdale-Pompano Beach (Perimeter Road: AQS Site #12-086-0035) areas became operational in May and December of 2016, respectively.

CBSAs with Population over 1,000,000	Population (2016)	AADT ≥250,000	Required Near- road Monitors	Required Community - wide Monitor	Vulnerable and Susceptible	Total
Miami-Fort	6.066.207	/	2.1		1	
Lauderdale-Pompano Beach	6,066,387	$\checkmark$	2 1	1	1	4
Tampa-St.						
Petersburg-	3,032,171	N/A	2 1	1	N/A	3
Clearwater						
Orlando-Kissimmee	2,441,257	N/A	$1^{2}$	1	N/A	2
Jacksonville	1,478,212	N/A	1	1	N/A	2
Total						11

 Table 4.7 NO2 Monitoring Required by 2010 NAAQS

<sup>1</sup> Population greater than 2.5 million requires two near-road sites.

<sup>2</sup> Orlando-Kissimmee near-road site has approval for temporary closure as of 7/1/2017.

#### <u>Community-wide NO<sub>2</sub> Monitoring</u>

Community-wide  $NO_2$  monitoring sites are required in each CBSA with a population of 1 million or more. In Florida, there are four CBSAs that meet this criterion: Miami-Fort Lauderdale-Miami Beach, Tampa-St. Petersburg-Clearwater, Orlando-Kissimmee and Jacksonville. The  $NO_2$ monitors that have been designated as community-wide monitors are listed in Table 4.8 below.

#### <u>Vulnerable and Susceptible Monitoring</u>

The 2010 NO<sub>2</sub> NAAQS revision included monitoring requirements for vulnerable and susceptible populations. Vulnerable populations are those exposed to higher concentrations of NO<sub>2</sub>, such as individuals living and working near high traffic volume highways, and this exposure will be monitored with the near-road network. Susceptible populations are those affected by lower levels of NO<sub>2</sub> or that experience a larger health impact than the general population to a given level of exposure. Per EPA's Integrated Science Assessment for Oxides of Nitrogen-Health Criteria, factors that can confer susceptibility include pre-existing diseases (e.g., asthma).

Florida participates in the National Environmental Public Health Tracking Network supported by the U.S. Centers for Disease Control. This program examines health and environmental data to help federal, state and local agencies plan, apply and develop environmental public health actions. Higher crude rate of asthma hospitalizations has been used as an indicator of vulnerable and susceptible communities in Florida. Miami-Dade County's NO<sub>2</sub> site, located at the University of Miami, Rosenstiel (AOS Site #12-086-0027), has been designated as a vulnerable and susceptible monitoring site for NO<sub>2</sub>. Figure 4.1 provides the most recent year of Florida's crude rate of asthma hospitalization by county for which data are available. The full list of the NO<sub>2</sub> monitors identified bv Regional Administrators be found EPA's the can on website at https://www3.epa.gov/ttnamti1/svpop.html.

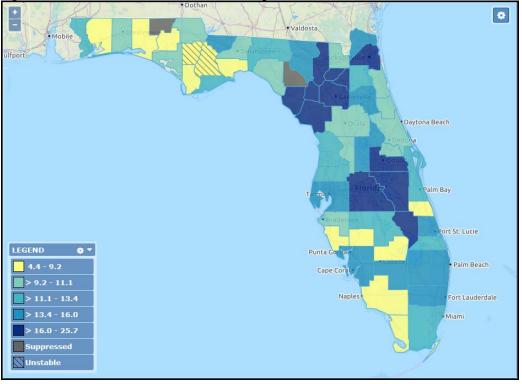


Figure 4.1 2014 Florida Crude Rate of Asthma Hospitalization

 Table 4.8 Florida's NO2 Network and Monitor Designations

CBSAs with Population over 500,000	AQS Site #	Site Name	Designation	
	12-011-0035	Fort Lauderdale Near Road	NO <sub>2</sub> Near-road	
	12-011-8002	Dr. Von Mizell-Eula Johnson State Park	NO <sub>2</sub> Community-wide Monitor	
Miami-Fort Lauderdale-	12-086-0027	Rosenstiel (University of Miami)	NO <sub>2</sub> Vulnerable and Susceptible monitor	
Pompano Beach	12-086-0035	Perimeter Road Near-road	NO <sub>2</sub> Near-road	
	12-086-4002	Lab Annex	NO <sub>2</sub> Network	
	12-099-0021	Lantana Preserve	NO <sub>2</sub> Network	
	12-057-0113	Munro Street Near-road	NO <sub>2</sub> Near-road	
Tampa-St.	12-057-1065	USMC Reserve Center	NO <sub>2</sub> Network	
Petersburg- Clearwater	12-103-0018	Azalea Park	NO <sub>2</sub> Community-wide Monitor	
Clearwater	12-103-0027	Sawgrass Lake Park Near- road	NO <sub>2</sub> Near-road	
Orlando- Kissimmee	12-095-2002	Lake Isle Estates – Winter Park	NO <sub>2</sub> Community-wide Monitor	
Jacksonville	12-031-0032	Kooker Park	NO <sub>2</sub> Community-wide Monitor	
Jacksonvine	12-031-0108	Pepsi Place Near-road	NO <sub>2</sub> Near-road	
Sarasota- Bradenton- Venice	12-115-1006	Paw Park	NO <sub>2</sub> Network	

# **4.8 CO MONITORING NETWORK**

Florida's carbon monoxide (CO) network covers large urban areas to smaller rural areas, totaling 11 monitoring sites. This network enables the state of Florida to monitor the consistent decrease in CO emissions within the state and to identify the parts of the state with peak CO concentrations. Table 4.9 lists all CO monitoring stations within the state and any exceedances for calendar years 2015 to 2017.

AQS Site #	Site Name	Pollutant	Exceedances for 2015-2017	Comments
12-011-0034	Daniela Banu (NCore Site)	CO	0	
12-011-0035	11-0035 Fort Lauderdale Near Road		0	Supports Near-road NO <sub>2</sub> Monitoring
12-086-4002	Lab Annex	СО	0	
12-057-0113	Munro Street	СО	0	Supports Near-road NO <sub>2</sub> Monitoring
12-057-3002	Sydney (NCore Site)	СО	0	
12-103-0027	Sawgrass Lake Park	СО	0	Supports Near-road NO <sub>2</sub> Monitoring
12-103-2008	Gateway	СО	0	
12-031-0108	Pepsi Place	СО	0	Supports Near-road NO <sub>2</sub> Monitoring
12-095-2002	Lake Isle Estates - Winter Park	СО	0	
12-129-0001	St. Marks Wildlife Refuge (NCore Site)	СО	0	

#### Table 4.9 Florida's CO Network

# 4.9 PM<sub>10</sub> MONITORING NETWORK

### • <u>The Federal Reference Method and Federal Equivalent Method Network</u>

Florida's PQAO currently operates 3 federal reference method (FRM) and 18 federal equivalent method (FEM) monitors. This network is sufficient to protect the health and welfare of Florida's residents and environment. It also provides information on how  $PM_{10}$  particles are transported to and within the state, to identify the parts of the state with the highest concentrations, and to determine where  $PM_{10}$  concentrations do and do not exceed the NAAQS. There is an approved siting criteria waiver for the source-oriented Woodlawn site in Pinellas County (AQS Site #: 12-103-0012), which will be reevaluated during the next 5-year Network Assessment. All of Florida's  $PM_{10}$  monitoring sites meet the NAAQS for calendar years 2015 to 2017, as detailed in Table 4.10.

AQS Site #	Site Name	Pollutant	Method: FRM/FEM	Operating Schedule	Exceedances for 2015- 2017	Comments
12-009-0007	Melbourne	PM <sub>10</sub>	FEM	Continuous	0	
12-011-0034	Daniela Banu (NCore Site)	PM <sub>10</sub>	FEM	Continuous	0	
12-011-5005	Coconut Creek	PM10	FEM	Continuous	0	
12-031-0032	Kooker Park	$PM_{10}$	FEM	Continuous	0	
12-031-0108	Pepsi Place	PM <sub>10</sub>	FEM	Continuous	0	
12-057-0083	Gardinier Park	$PM_{10}$	FEM	Continuous	0	
12-057-1035	Davis Island (Coast Guard Station)	$PM_{10}$	FEM	Continuous	0	
12-057-3002	Sydney	$PM_{10}$	FRM	Every 6th Day	0	
12-037-3002	(NCore Site)	P1 <b>VI</b> 10	FRM	Every 12th Day	0	Collocated monitor
12-071-0005	Winkler Pump Station	$PM_{10}$	FEM	Continuous	0	
12-086-1016	Miami Fire Station	PM <sub>10</sub>	FEM	Continuous	0	
12-091-0002	Fort Walton Beach	PM <sub>10</sub>	FEM	Continuous	0	
12-095-2002	Lake Isle Estates - Winter Park	$PM_{10}$	FEM	Continuous	0	
12-099-2005	Delray Beach	$PM_{10}$	FEM	Continuous	0	
12-103-0012	Woodlawn	PM <sub>10</sub>	FRM	Every 6th Day	0	
12-103-0018	Azalea Park	PM10	FEM	Continuous		
12-103-3004	County Motorpool	PM <sub>10</sub>	FRM	Every 6th Day	0	
12-105-6006	Baptist Children's Home	PM <sub>10</sub>	FEM	Continuous	0	

Table 4.10 Florida	's PM10 Network

12-107-1008	Palatka Barge Port	PM10	FEM	Continuous	0	
12-115-1006	Paw Park	$PM_{10}$	FEM	Continuous	0	
12-117-1002	Seminole Community College	PM <sub>10</sub>	FEM	Continuous	0	
12-127-5002	Daytona - Blind Services	PM <sub>10</sub>	FEM	Continuous	0	

# 4.10 LEAD MONITORING NETWORK

Florida's PQAO currently operates 3 lead (Pb) source monitors. This network is sufficient to protect the health and welfare of Florida's residents and environment. It also provides information on how Pb particles are transported to and within the state due to the known sources and to determine where Pb source concentrations do and do not exceed the NAAQS. All of Florida's Pb monitoring sites and their 2015 to 2017 design values are detailed in Table 4.11 below.

AQS Site #	Site Name	2015-2017 Design Values
12-057-0100	Kenly	0.01
12-057-1066	Gulf Coast Lead	0.13
12-057-1073	Patent Scaffolding	0.15

Table 4.11 Florida's Lead Source Monitoring Network

# **5.0 GLOSSARY OF AIR MONITORING TERMS**

AADT	Annual Average Daily Traffic
AAMNAG	Ambient Air Monitoring Network Assessment Guidance
AQI	Air Quality Index – EPA's standardized method of reporting air quality information and forecast to the public.
AQS	Air Quality System – EPA's repository of ambient air quality data.
BAM	Beta Attenuation Mass Monitor – a type of continuous PM <sub>2.5</sub> monitor.
CBSA	Core Based Statistical Area – a collective term for both Metropolitan (metro) and micropolitan (micro) statistical areas.
CFR	Code of Federal Regulations
СО	Carbon monoxide – an odorless, colorless gaseous; one of the "Six Common Air Pollutants," also known as "Criteria Pollutants," regulated by EPA.
FE-AADT	Fleet Equivalent Annual Average Daily Traffic – a value calculated according to the NO <sub>2</sub> near-road technical assistance document, which weighs heavy-duty traffic 10 times more than other vehicles.
FEM	Federal Equivalence Method – method approved for comparison to NAAQS.
FRM	Federal Reference Method – method approved for comparison to NAAQS.
IMPROVE	Interagency Monitoring of Protected Visual Environments
	Metropolitan Statistical Area - a "geographic entity defined by the U.S. Office of Management and
MSA	Budget (OMB) for use by federal statistical agencies in collecting, tabulating, and publishing Federal statistics." A MSA consists of a core urban area of at least 50,000 people.
	National Ambient Air Quality Standards - maximum threshold concentrations above which adverse
NAAQS	health effects may occur. EPA established NAAQS for Criteria Pollutants based on the 1970 Clean Air
	Act.
NATTS	National Air Toxics Trends Stations
NCore	National Core multi-pollutant monitoring stations – a collection of monitors that integrates several
	advanced measurement systems for particles, pollutant gases and meteorology.
NEI	National Emissions Inventory
NO	Nitrogen oxide
$NO_2$	Nitrogen dioxide – a by-product of incomplete combustion that is intimately involved in photochemistry
1102	and ozone formation, as well as acid rain formation.
NO <sub>x</sub>	A measure of total oxides of nitrogen, consisting primarily of nitrogen dioxide (NO <sub>2</sub> ) and nitric oxide (NO).
NO <sub>y</sub>	Total reactive nitrogen – a collective name for oxidized forms of nitrogen in the atmosphere,
noy	such as nitric oxide (NO), nitrogen dioxide (NO <sub>2</sub> ), nitric acid (HNO <sub>3</sub> ) and organic nitrates.
O <sub>3</sub>	Ozone – a gaseous pollutant and a component of smog at ground level; one of the "Six Common Air Pollutants," also known as "Criteria Pollutants," regulated by EPA.
PAMS	Photochemical Assessment Monitoring Station
PM	Particulate Matter – also known as particle pollution.
PM <sub>2.5</sub>	Particulate Matter 2.5 micrometers in diameter and smaller.
$PM_{10}$	Particulate Matter 10 micrometers in diameter and smaller.
PM <sub>10-2.5</sub>	Particle size between 10 and 2.5.
PQAO	Primary Quality Assurance Organization
PWEI	Population Weighed Emissions Index
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
SLAMS	State and Local Air Monitor Stations
$SO_2$	Sulfur dioxide
SPM	Special Purpose Monitors
STN	Speciation Trends Network
SU/SD	Set-up/ Shut-down

# **6.0 APPENDICES**

### **APPENDIX A: ADDITIONAL NETWORK INFORMATION**

This appendix provides additional information to facilitate a full evaluation of several relocations within Florida's air monitoring network.

#### A.1 Site Relocations

#### > Pompano Highlands Site: AQS Site # 12-011-2003

The Pompano Highlands Site (AQS Site #: 12-011-2003) will be relocated 8.25 meters east of its original location to resolve existing siting criteria issues. A new shelter will be constructed on the property since the existing shelter is beyond repair. The site remains representative of the area's air mass and will retain its AQS Site number.

Photos and Wind Rose for the Broward County: Pompano Highlands Site - AQS # 12-011-2003

Figure 6.1 North from Pompano Highlands Site



#### Figure 6.2 Northeast from Pompano Highlands Site



Figure 6.3 South from Pompano Highlands Site



Figure 6.4 Southeast from Pompano Highlands Site



Figure 6.5 East from Pompano Highlands Site



Figure 6.6 Southwest from Pompano Highlands Site



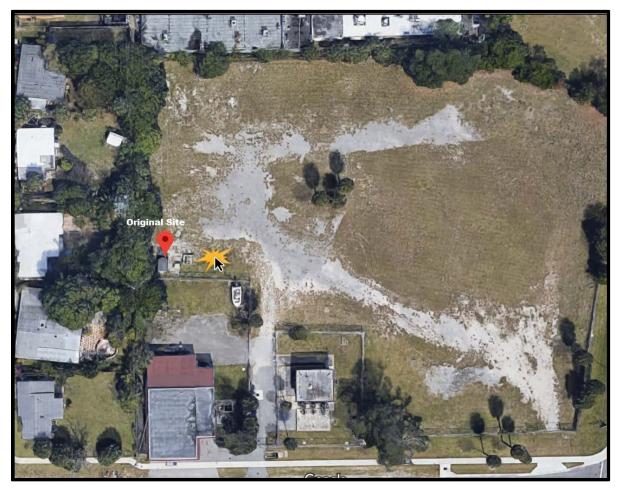
Figure 6.7 West from Pompano Highlands Site

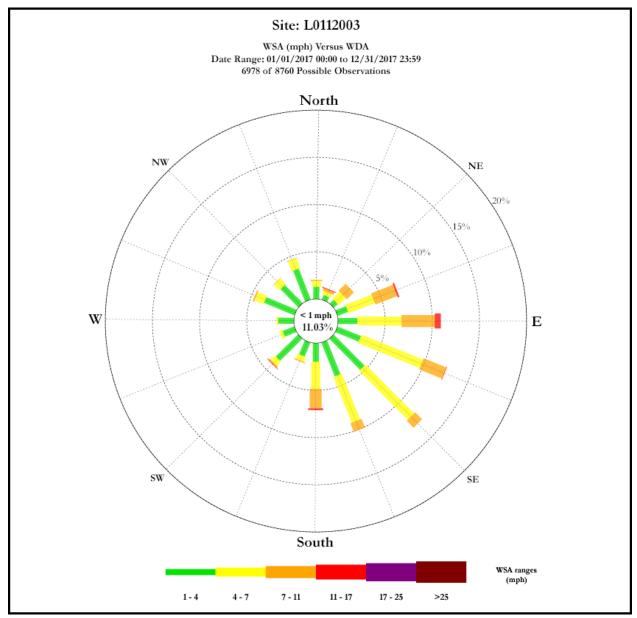


Figure 6.8 Northwest from Pompano Highlands Site



### Figure 6.9 Aerial of Pompano Highlands Site





#### Figure 6.10 Wind Rose from Pompano Highlands Site (AQS Site 12-011-2003)

### > Dr. Von D. Mizell-Eula Johnson State Park Site: AQS Site # 12-011-8002

The Dr. Von D. Mizell-Eula Johnson State Park Site (AQS Site #: 12-011-8002) will be relocated 4.52 meters east of its original location to resolve existing siting criteria issues. A new shelter will be constructed on the property since the existing shelter is beyond repair. The site remains representative of the area's air mass and will retain its AQS Site number.

Photos and Wind Rose for the Broward County: Dr. Von D. Mizell-Eula Johnson State Park Site <u>- AQS # 12-011-8002</u>

Figure 6.11 North from Dr. Von D. Mizell-Eula Johnson State Park Site



Figure 6.12 Northeast from Dr. Von D. Mizell-Eula Johnson State Park Site



Figure 6.13 East from Dr. Von D. Mizell-Eula Johnson State Park Site



Figure 6.14 Southeast from Dr. Von D. Mizell-Eula Johnson State Park Site



Figure 6.15 South from Dr. Von D. Mizell-Eula Johnson State Park Site





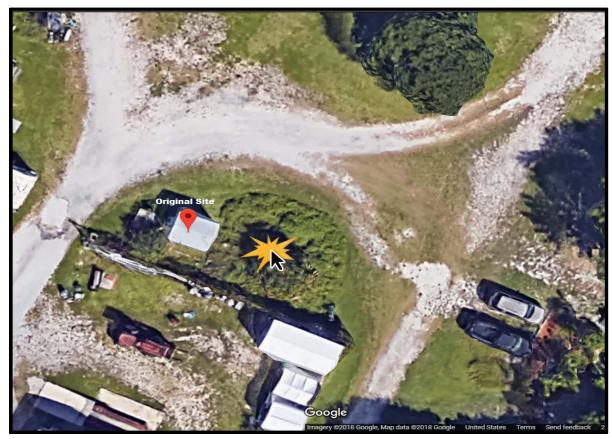
Figure 6.17 West from Dr. Von D. Mizell-Eula Johnson State Park Site

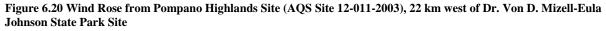


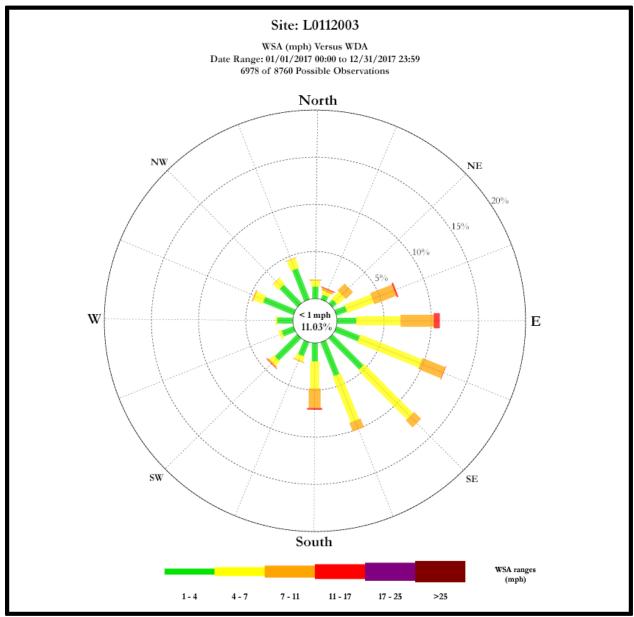
Figure 6.18 Northwest from Dr. Von D. Mizell-Eula Johnson State Park Site



Figure 6.19 Aerial of Dr. Von D. Mizell-Eula Johnson State Park Site







### **APPENDIX B: ANNUAL SITE REVIEW SUMMARY**

The Florida DEP's audit staff conduct site reviews to verify that sites meet probe line siting criteria. Identified issues are resolved as quickly as practicable. All site reviews are provided to EPA Region 4 annually via Florida DEP's FTP site. However, the date of the most recent site review, notes as to whether there are existing issues, and any comments regarding these issues are provided in the summary table below.

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments
12-001-0023	MILLHOPPER	Manual $PM_{2.5}(2)^*$	August 22, 2017	No	N/A
12-001-3012	PAYNES PRAIRIE FARM	Ozone Continuous PM <sub>2.5</sub>	March 6, 2018	No	N/A
12-003-0002	OSCEOLA NATIONAL FOREST – OLUSTEEE RANGER STATION	Ozone	July 11, 2017	No	N/A
12-005-0006	ST. ANDREWS STATE PARK	Ozone Continuous PM <sub>2.5</sub>	April 2, 2018	No	N/A
12-009-0007	MELBOURNE	Ozone Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub> Continuous PM <sub>10</sub>	February 5, 2018	No	N/A
12-009-4001	COCOA BEACH	Ozone	April 10, 2018	No	N/A
12-011-0033	VISTA VIEW PARK	Ozone Continuous PM <sub>2.5</sub>	October 31, 2017	No	N/A
12-011-0034	<mark>DANIELA BANU</mark> (NCORE SITE)	Ozone Manual PM <sub>10</sub> Manual PM <sub>2.5</sub> (2) <sup>*</sup> Continuous PM <sub>2.5</sub> Trace CO Trace SO <sub>2</sub> NO <sub>y</sub> SASS URG Low Volume PM <sub>10</sub> Summa Toxics	July 17, 2017	No	N/A
12-011-0035	FORT LAUDERDALE NEAR ROAD	NO <sub>2</sub> CO Continuous PM <sub>2.5</sub> Black Carbon Ultrafine	April 24, 2018	No	N/A
12-011-2003	POMPANO HIGHLAND FIRE HOUSE	Ozone Manual PM <sub>2.5</sub>	April 24, 2018	Yes	Trees within 10 meters – being addressed by site relocation.
12-011-5005	COCONUT CREEK	Manual PM <sub>2.5</sub> Continuous PM <sub>10</sub>	October 30, 2017	No	N/A
12-011-8002	DR. VON D. MIZELL-EULA JOHNSON STATE PARK	Ozone NO <sub>2</sub>	April 24, 2018	Yes	Tree within 10 meters – being addressed by site relocation.
12-017-0006	CRYSTAL RIVER PRESERVE	SO <sub>2</sub>	June 4, 2018	No	N/A
12-021-0004	LAUREL OAK ELEMENTARY	Ozone Continuous PM <sub>2.5</sub>	January 10, 2018	No	N/A

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments
12-023-0002	LAKE CITY - VETERANS DOMICILE	Ozone Continuous PM <sub>2.5</sub>	April 4, 2018	No	N/A
12-031-0032	KOOKER PARK	SO <sub>2</sub> NO <sub>2</sub> Manual PM <sub>2.5</sub> Continuous PM <sub>10</sub>	January 22, 2018	No	N/A
12-031-0077	SHEFFIELD ELEMENTARY	Ozone Continuous PM <sub>2.5</sub> Toxics	May 8, 2018	No	N/A
12-031-0081	CEDAR BAY STP	SO <sub>2</sub>	July 24, 2017	No	N/A
12-031-0084	ROSSELLE	CO Continuous PM <sub>10</sub> Toxics	June 11, 2018	No	N/A
12-031-0097	FORT CAROLINE ROAD	SO <sub>2</sub>	November 16, 2017	No	N/A
12-031-0098	MANDARIN RD SITE	Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub>	January 24, 2018	Yes	Trees within 10 meters – being addressed.
12-031-0099	SUNNY ACRES	Manual $PM_{2.5}(2)^*$	July 24, 2017	No	N/A
12-031-0100	MAYO CLINIC	Ozone Continuous PM <sub>2.5</sub> Toxics	July 25, 2017	No	N/A
12-031-0106	CISCO DRIVE	Ozone	November 13, 2017	No	N/A
12-031-0108	PEPSI PLACE	NO <sub>2</sub> CO Continuous PM <sub>2.5</sub>	May 9, 2018	No	N/A
12-033-0004	ELLYSON INDUSTRIAL PARK	Ozone SO <sub>2</sub> Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub>	January 30, 2018	No	N/A
12-033-0018	PENSACOLA NAS	Ozone	August 2, 2017	No	N/A
12-035-0004	FLAGLER	Ozone	October 23, 2017	No	N/A
12-047-0015	WHITE SPRINGS	SO <sub>2</sub> Continuous PM <sub>2.5</sub>	January 17, 2018	No	N/A
12-055-0003	ARCHBOLD BIOLOGICAL STATION	Ozone	January 9, 2018	No	N/A
12-057-0081	E.G. SIMMONS PARK	Ozone SO <sub>2</sub>	October 10, 2017	No	N/A
12-057-0083	GARDINIER PARK	Continuous PM <sub>10</sub>	April 17, 2018	No	N/A
12-057-0100	KENLY	Pb	October 11, 2017	No	N/A
12-057-0109	EAST BAY	SO <sub>2</sub>	April 17, 2018	No	N/A
12-057-0112	APOLLO BEACH	SO <sub>2</sub> Continuous PM <sub>2.5</sub>	January 18, 2018	No	N/A
12-057-0113	MUNRO STREET	Trace NO <sub>2</sub> Trace CO Continuous PM <sub>2.5</sub>	June 19, 2018	No	N/A
12-057-1035	DAVIS ISLAND (COAST GUARD STATION)	Ozone SO <sub>2</sub> Continuous PM <sub>10</sub>	July 18, 2017	Yes	Trees within 10 meters – being addressed with EPA's assistance.

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments
12-057-1065	USMC RESERVE CENTER	Ozone NO <sub>2</sub> Continuous PM <sub>2.5</sub>	April 18, 2018	No	N/A
12-057-1066	GULF COAST LEAD	Pb (2)*	April 17, 2018	No	N/A
12-057-1073	PATENT SCAFFOLDING	Pb	July 19, 2017	No	N/A
12-057-3002	SYDNEY (NCORE SITE)	Ozone $NO_y$ Trace $SO_2$ Trace CO Continuous $PM_{2.5}$ Manual $PM_{2.5}$ (2)* $PM_{10}$ (2)* Low Volume $PM_{10}$ SASS URG Toxics Summa ERG Aromatic Hydrocarbon $PM_{10}/Puff$	February 21, 2018	No	N/A
12-059-0004	BONIFAY TRI- COUNTY AIRPORT	Ozone Continuous PM <sub>2.5</sub>	October 31, 2017	No	N/A
12-069-0002	CLERMONT	Ozone	October 25, 2017	No	N/A
12-071-0005	WINKLER PUMP STATION	Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub> Continuous PM <sub>10</sub>	January 10, 2018	No	N/A
12-071-2002	ROTARY PARK	Ozone	July 26, 2017	No	N/A
12-071-3002	BAY OAKS PARK	Ozone	July 25, 2017	No	N/A
12-073-0012	TALLAHASSEE COMMUNITY COLLEGE	Ozone Manual PM <sub>2.5</sub> (2) <sup>*</sup> Continuous PM <sub>2.5</sub> SASS URG RADNET	June 5, 2018	No	N/A
12-081-0028	PORT MANATEE DEP	SO <sub>2</sub>	May 8, 2018	No	N/A
12-081-3002	PORT MANATEE	Ozone	September 25, 2017	No	N/A
12-081-4012	GT BRAY PARK	Ozone	September 26, 2017	No	N/A
12-081-4013	39TH STREET PARK	Ozone	September 26, 2017	No	N/A
12-083-0003	OCALA - YMCA	Ozone Continuous PM <sub>2.5</sub>	June 5, 2018	No	N/A
12-083-0004	MARION COUNTY SHERIFF	Ozone	November 15, 2017	No	N/A
12-085-0007	STUART	Ozone Continuous PM <sub>2.5</sub>	February 6, 2018	No	N/A
12-086-0019	PENNSUCO	SO <sub>2</sub>	May 1, 2018	No	N/A

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments
12-086-0027	ROSENSTIEL (UNIVERSITY OF MIAMI)	Ozone NO <sub>2</sub>	August 8, 2017	No	N/A
12-086-0029	PERDUE	Ozone	May 2, 2018	No	N/A
12-086-0033	PALM SPRINGS FIRE STATION	Manual PM <sub>2.5</sub>	February 12, 2018	No	N/A
12-086-0034	KENDALL	СО	February 13, 2018	No	N/A
12-086-0035	PERIMETER ROAD	NO <sub>2</sub> CO Continuous PM <sub>2.5</sub>	May 1, 2018	No	N/A
12-086-1016	MIAMI FIRE STATION	$\begin{array}{c} \text{Manual PM}_{2.5} \left(2\right)^{*} \\ \text{Continuous PM}_{2.5} \\ \text{PM}_{10} \left(2\right)^{*} \end{array}$	August 9, 2017	No	N/A
12-086-4002	LAB ANNEX	NO <sub>2</sub> CO	December 5, 2017	No	N/A
12-086-6001	HOMESTEAD FIRE STATION	Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub>	December 4, 2017	No	N/A
12-089-0005	FERNANDINA BEACH WASTE WATER TREATMENT PLANT (FBWWTP)	SO <sub>2</sub>	April 3, 2018	No	N/A
12-089-0010	YULEE	Continuous PM <sub>2.5</sub>	October 3, 2017	No	N/A
12-091-0002	FORTWALTON BEACH	Ozone Continuous PM <sub>10</sub>	November 1, 2017	No	N/A
12-095-0008	WINEGARD ELEMENTARY SCHOOL	Ozone	March 13, 2018	No	N/A
12-095-0009	I-4 NEAR ROAD	NO2 CO Continuous PM2.5	March 15, 2017	Yes	The siting criteria is not currently being met due to construction. However, a temporary monitoring waiver was granted from EPA. Site has been temporarily closed since July 1, 2017.
12-095-2002	LAKE ISLE ESTATES - WINTER PARK	Ozone NO <sub>2</sub> SO <sub>2</sub> CO PM <sub>10</sub> Continuous PM <sub>2.5</sub>	August 8, 2017	No	N/A
12-097-2002	OSCEOLA CO. FIRE STATION - FOUR CORNERS	Ozone	October 24, 2017	Yes	Trees within 10 meters of inlet – being addressed with EPA's assistance.
12-099-0008	BELLE GLADE	Continuous PM <sub>2.5</sub>	June 4, 2018	No	N/A
12-099-0021	LANTANA PRESERVE	Ozone NO <sub>2</sub> Continuous PM <sub>10</sub>	June 5, 2018	No	N/A

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments
12-099-0022	LAMSTEIN LANE	Ozone Manual PM <sub>2.5</sub> (2) <sup>*</sup> Continuous PM <sub>10</sub>	November 28, 2017	No	N/A
12-099-2005	DELRAY BEACH	Manual PM <sub>2.5</sub>	November 28, 2017	No	N/A
12-101-0005	SAN ANTONIO	Ozone	May 9, 2018	No	N/A
12-101-2001	HOLIDAY	Ozone	November 29, 2017	No	N/A
12-103-0004	ST. PETERSBURG COLLEGE	Ozone	January 23, 2018	No	N/A
12-103-0012	WOODLAWN	$PM_{10}$	July 12, 2017	Yes	A siting criteria waiver was granted by EPA in 2017.
12-103-0018	AZALEA PARK	Ozone NO <sub>2</sub> Manual PM <sub>2.5</sub> PM <sub>10</sub> Continuous PM <sub>2.5</sub> Carbonyl VOC	July 11, 2017	No	N/A
12-103-0023	DERBY LANE	SO <sub>2</sub>	October 25, 2017	No	N/A
12-103-0027	SAWGRASS LAKE PARK	NO <sub>2</sub> CO Aethalometer	April 3, 2018	No	N/A
12-103-1009	SANDY LANE	Manual PM <sub>2.5</sub>	April 5, 2018	No	N/A
12-103-2008	GATEWAY	СО	January 24, 2018	No	N/A
12-103-3004	COUNTY MOTORPOOL	Manual $PM_{10}(2)^*$	October 25, 2017	No	N/A
12-103-5002	JOHN CHESTNUT SR. PARK - EAST LAKE	Ozone Continuous PM <sub>2.5</sub>	April 5, 2018	No	N/A
12-103-5003	OAKWOOD	SO <sub>2</sub>	April 4, 2018	No	N/A
12-105-6005	SIKES ELEMENTARY SCHOOL	Ozone SO <sub>2</sub>	September 27, 2017	Yes	Trees are too tall for inlets – considering site relocation.
12-105-6006	BAPTIST CHILDRENS HOME	Ozone Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub> Continuous PM <sub>10</sub>	February 12, 2018	Yes	Trees are too close and too tall for all inlets – being addressed
12-107-1008	PALATKA BARGE PORT	SO <sub>2</sub> Continuous PM <sub>10</sub>	March 8, 2018	No	N/A
12-111-0013	SAVANNAS	Ozone	February 6, 2018	No	N/A
12-113-0015	WOODLAWN BEACH MIDDLE SCHOOL	Ozone Continuous PM <sub>2.5</sub>	January 31, 2018	No	N/A
12-115-0013	BEE RIDGE PARK	Manual PM <sub>2.5</sub> Continuous PM <sub>2.5</sub>	April 16, 2018	No	N/A
12-115-1005	LIDO PARK	Ozone	October 10, 2017	No	N/A
12-115-1006	PAW PARK	Ozone NO <sub>2</sub> Continuous PM <sub>10</sub>	October 11, 2017	No	N/A
12-115-2002	JACKSON ROAD	Ozone Continuous PM <sub>2.5</sub>	April 17, 2018	No	N/A

AQS #	Site Name	Parameter(s)	Site Review Date <sup>1</sup>	Issues?	Issues/Comments	
12-117-1002	SANFORD	Ozone Manual PM <sub>2.5</sub> Continuous PM <sub>10</sub>	April 11, 2018	No	N/A	
12-127-2001	PORT ORANGE	Ozone	August 21, 2017	Yes	The siting criteria was not being met, however the site was closed on March 31, 2018.	
12-127-5002	DAYTONA - BLIND SERVICES	Ozone Manual PM <sub>2.5</sub> (2) <sup>*</sup> Continuous PM <sub>2.5</sub> Continuous PM <sub>10</sub>	August 21, 2017	No	N/A	
12-129-0001	ST. MARKS WILDLIFE REFUGE (NCORE SITE)	Ozone NOy Trace SO <sub>2</sub> Trace CO Continuous PM <sub>2.5</sub>	March 15, 2018	No	N/A	

<sup>1</sup>Includes site reviews conducted as of May 11, 2018. \*Primary and collocated monitor.

### **APPENDIX C: AMBIENT AIR MONITORING NETWORK DESCRIPTION**

Florida's air monitoring network, including changes expected through June 30, 2019, is described in Appendix C. It is organized by Metropolitan Statistical Area from largest to smallest.

#### Florida's Ambient Air Monitoring Network Description

	METROPOLITAN STATISTICAL AREA: MIAMI - FT LAUDERDALE - MIAMI BEACH (BROWARD, MIAMI-DADE AND PALM BEACH COUNTIES)												
							Broward County						
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS	
12 011 0022		4001 SW 142 Ave, Davie,	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	TRENDS MONITORING		SU 7/1/2008	
12-011-0033	Vista View Park	FL 33330; 26.073056, - 80.338889	SPM	PM <sub>2.5</sub>	3	Continuous	MET One BAM 1020	POP EXP	NBH	TRENDS MONITORING		SU 1/28/2009	
			SLAMS	СО	1	Continuous	Thermo 48C-TLE	POP EXP	NBH	NEEDED BY REGULATION		SU 7/1/2015; Trace Level; MET EXPECTED 7/1/2017	
			SLAMS	$SO_2$	1	Continuous	Thermo 43i-TLE	POP EXP	NBH	NEEDED BY REGULATION		SU 7/1/2015; Trace Level	
			SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 7/1/2015	
			SLAMS	$PM_{10}$	1	Every 6th Day	Tisch	POP EXP	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/18/2015; SD 12/31/2017	
			SLAMS	PM <sub>10</sub>	2	Every 6th Day	Tisch	POP EXP	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/18/2015; Collocated monitor; SD 12/31/2017	
	D 11 D	Davie EL 33328, 26 0538889	SLAMS	$PM_{10}$	3	Continuous	MET One eBAMS+	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/1/2018; FEM	
12-011-0034	-0034 Daniela Banu (NCore Site) Davie, FL 33328; 2		SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/2015; Collocated monitor	
			SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo 2025i	POP EXP	NBH	QA COLLOCATION		SU 1/1/2015; Collocated monitor	
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	POP EXP	NBH	NEEDED BY REGULATION		SU 7/1/2015; FEM	
			SLAMS	NOy	1	Continuous	Thermo 42i-Y	POP EXP	NBH	NEEDED BY REGULATION		SU 7/1/2015; Trace Level	
			SLAMS	SPEC. PM <sub>2.5</sub>	5	Every 6th Day	MET ONE SASS	POP EXP	NBH	TRENDS MONITORING		SU 1/1/2015	
			SLAMS	PMCoarse	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/2016	
			CSN	EC/OC		Every 3rd Day	URG 3000N	POP EXP	NBH	TRENDS MONITORING		SU 1/1/2015	
			NON-REG	Toxics		Every 6th Day	ATEC 2200	POP EXP	NBH	BASELINE MONITORING		SU 11/1/2015	
			SLAMS	СО	1	Continuous	Thermo 48i-TLE	POP EXP	URBAN	NEEDED BY REGULATION		SU 8/1/2015; Trace level	
			SLAMS	NO <sub>2</sub>	1	Continuous	Teledyne T200UP	POP EXP	URBAN	NEEDED BY REGULATION		SU 8/1/2015; Near-road Site	
12-011-0035	Fort Lauderdale Near Road	799 N I-95, Ft. Lauderdale, FL 33311; 26.131256, -80.167847	SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	POP EXP	URBAN	NEEDED BY REGULATION		SU 8/1/2015; FEM	
			SLAMS	BC	1	Continuous	Teledyne API 633	POP EXP	URBAN	NEEDED BY REGULATION		SU 1/20/2017	
			SLAMS	UFP	1	Continuous	TSI 3031	POP EXP	URBAN	NEEDED BY REGULATION		SU 3/15/2017	
12-011-2003	Pompano Highland Fire	1951 NE 48th Street, Pompano Beach, FL 33060;	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	RELIED ON FOR SPATIAL COVERAGE		SU 1/1/1989	
	House	26.290765, -80.096665	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	HI CONC	NBH	INTERPOLATION		SU 7/10/2010	
		5005 Winston Park Blvd.	SLAMS	$PM_{10}$	1	Every 6th Day	Tisch	POP EXP	NBH	SOURCE MONITORING	REPLACED BY FEM	SU 10/31/1995; SD 12/31/2017	
12-011-5005	Coconut Creek	Coconut Creek, FL 33073;	SLAMS	$PM_{10}$	1	Continuous	MET One eBAMS+	POP EXP	NBH	SOURCE MONITORING	ADD	SU 1/1/2018; FEM	
12-011-5005	Coconut Creek	26.294167, -80.176389	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	POP EXP	NBH	NEEDED BY REGULATION		SU 9/30/2009	
12-011-8002	Dr. Von Mizell- Eula Johnson State	7000 N. Ocean Dr., Dania, FL	SLAMS	NO <sub>2</sub>	1	Continuous	Thermo 42i	POP EXP	NBH	COMM-WIDE MONITORING		SU 7/8/1990	
12-011-0002	Park	33004; 26.087198, -80.111415	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 1/1/1985	

Miami-Dade County												
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-086-0019	Pennsuco	14001-14027 N Okeechobee Rd, Hialeah, FL 33018; 25.899167, -80.382778	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	POP EXP	NBH	TRENDS MONITORING	MONITORING OBJECTIVE CHANGE	SU 8/18/1987
12-086-0027	Rosenstiel (University of	4600 Rickenbacker Causeway, Miami, FL 33149; 25.732500, -	SLAMS	NO <sub>2</sub>	1	Continuous	Teledyne T200	POP EXP/ UPWIND BKGD	NBH	VULNERABLE AND SUSCEPTIBLE MONITORING		SU 1/30/1985
	Miami)	80.161944	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP/ UPWIND BKGD	NBH	NEEDED BY REGULATION		SU 3/7/1984
12-086-0029	Perdue	19590 Old Cutler Rd, Cutler Ridge, FL 33157; 25.586944, - 80.326111	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	USED FOR AQI		SU 5/1/1985
12-086-0033	Palm Springs Fire Station	7700 NW 186th St, Palm Springs, FL 33015; 25.9419444, -80.3263889	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	POP EXP	NBH	MONITORING GROWTH IMPACT		SU 5/4/2005
12-086-0034	Kendall	FL 33186; 25.683330, -	SPM	CO	1	Continuous	Teledyne 300E	POP EXP	MIDDLE	TRENDS MONITORING	CLOSE	SU 4/27/2005; SD EXPECTED 7/1/2018
12-000-0034	ixenuari	80 399722	SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1400AB	POP EXP	MIDDLE	USED FOR AQI	ADD	SU EXPECTED 7/1/2018
12-086-0035	Perimeter Road	5600 Perimeter Road, Miami, FL 33126; 25.7854722, - 80.2842055	SLAMS	NO <sub>2</sub>	1	Continuous	Teledyne T200UP	SOURCE	MICRO	NEEDED BY REGULATION		SU 1/11/2016; Near-road Site
			SLAMS	PM <sub>10</sub>	1	Every 6th Day	ANDERSEN 1200	HI CONC	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/1/1985; SD EXPECTED 7/1/2018
			SLAMS	PM <sub>10</sub>	2	Every 6th Day	ANDERSEN 1200	HI CONC	NBH	QA COLLOCATION	REPLACED BY FEM	SU 7/1/1988; Collocated monitor; SD EXPECTED 7/1/2018
12-086-1016	Miami Fire Station	1200 NW 20th St, Miami, FL 33142; 25.794722, -80.215556	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	HI CONC	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 2/4/1999; SD EXPECTED 7/1/2018
12-000-1010			SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo 2025i	HI CONC	NBH	QA COLLOCATION		SU 2/4/1999; Collocated monitor
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	HI CONC	NBH	USED FOR AQI	REPLACED BY FEM	SU 4/3/2002; SD EXPECTED 7/1/2018
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Teledyne T640X	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU EXPECTED 4/1/2018; FEM
			SLAMS	PM <sub>10</sub>	3	Continuous	Teledyne T640X	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU EXPECTED 4/1/2018; FEM
12-086-4002	Lab Annex	864 NW 3rd St, Miami, FL 33127; 25.798333, -80.210278	SLAMS SLAMS	CO NO <sub>2</sub>	2	Continuous	Teledyne 300E	HI CONC	NBH NBH	TRENDS MONITORING ASSIST IN FORCASTING		SU 1/1/1976 SU 1/1/1984
		325 NW 2nd St, Homestead,	SLAMS	NO <sub>2</sub>	2	Continuous	Teledyne T200	HI CONC	NBH	NEEDED BY		50 1/1/1984
12-086-6001	Homestead Fire Station	FL 33030; 25.471944, -	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	REGULATION		SU 1/27/1999
		80.482778	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	USED FOR AQI		SU 2/10/2004
						OPERATING	Palm Beach County	MONITORING	SPATIAL	STATEMENT OF		
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	SCHEDULE	SAMPLER	OBJECTIVE	SCALE	PURPOSE	MODIFICATIONS	COMMENTS
		968 N 8th St, Lantana, FL	SPM	NO <sub>2</sub>	1	Continuous	Teledyne T200	POP EXP	NBH	ASSIST IN FORCASTING		SU 2/2/2015
12-099-0021	Lantana Preserve	33462; 26.5938083, - 80.0584917	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	URBAN	NEEDED BY REGULATION		SU 2/2/2015
		Lamstein Ln, Royal Palm	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU EXPECTED 7/1/2019; Relocation from 099- 0009
12-099-0022	Lamstein Lane	Beach, FL 33411; 26.687606, - 80.219619	SLAMS	PM <sub>2.5</sub>	1	Continuous	Thermo 5014i	POP EXP	NBH	NEEDED BY REGULATION		SU EXPECTED 7/1/2019; FEM, Relocation from 099-0009
			SLAMS	PM <sub>2.5</sub>	2	Continuous	Thermo 5014i	POP EXP	NBH	NEEDED BY REGULATION		SU EXPECTED 7/1/2019; Collocated monitor; FEM; Relocation from 099-0009
12-099-0008	Belle Glade	38754 State Rd 80, Belle Glade, FL 33430; 26.724786, - 80.666447	NON-REG	PM <sub>2.5</sub>	3	Continuous	MET One BAM 1020	POP EXP	NBH	USED FOR AQI		SU 5/1/2009; FEM
12-099-2005	Delray Beach	225 S. Congress Ave, Delray Beach, FL 33445; 26.456944, -	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION		SU 5/31/2001
12-077-2003	Denay Beach	80.092778	SLAMS	PM <sub>10</sub>	3	Continuous	MET One BAM 1020	POP EXP	NBH	NEEDED BY REGULATION		SU 02/03/2015

	METROPOLITAN STATISTICAL AREA: TAMPA - ST PETERSBURG - CLEARWATER (HILLSBOROUGH, PINELLAS, PASCO AND HERNANDO COUNTIES)												
							Pasco County						
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS	
12-101-0005	San Antonio	30908 Warder Rd., San Antonio, FL 33576; 28.332225, -82.305643	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	URBAN	URBAN SPRAWL		SU 9/7/2000	
12-101-2001	Holiday	3452 Darlington Rd., Holiday, FL 34691; 28.195574, - 82.756264	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	URBAN SPRAWL		SU 1/17/1992	
							Hillsborough Count	ty					
12-057-0112	Apollo Beach	6506 Dolphin Cove Dr, Apollo Beach, FL 33572; 27.779712, -	SPM	$SO_2$	1	Continuous	Thermo 43i	SOURCE	MICRO	NEEDED BY REGULATION		SU 1/1/2016	
		82.419835	SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1405	SOURCE	MICRO	NEEDED BY REGULATION		SU 1/1/2016	
			SLAMS	CO	1	Continuous	Teledyne T300U	SOURCE	MICRO	NEEDED BY REGULATION		SU 2/1/2016; Relocation from 057-1111	
		1497 N. Munro Street, Tampa,	SLAMS	NO <sub>2</sub>	1	Continuous	Teledyne T200UP	SOURCE	MICRO	NEEDED BY REGULATION		SU 2/1/2016; Near-road Site; Relocation from 057-1111	
12-057-0113	Munro Street	FL 33607; 27.955550, -	SLAMS	PM <sub>2.5</sub>	1	Continuous	Thermo 5014i	SOURCE	MICRO	NEEDED BY REGULATION		SU 2/1/2016; FEM; Relocation from 057-1111	
		82.467140	SPM	BC	1	Continuous	Teledyne API 633	POPULATION EXPOSURE	MICRO	TRENDS MONITORING		SU 2/1/2016	
			SLAMS	UFP	1	Continuous	Teledyne API 651	SOURCE	MICRO	NEEDED BY REGULATION		SU 2/1/2016	
12-057-0081	E.G. Simmons Park	2401 19th Avenue Northwest, Ruskin, FL 33570; 27.740033, -82.465146	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	USED FOR AQI		SU 6/14/1978	
12-057-0083	Gardinier Park	6501 Riverview Dr., Riverview, FL 33578; 27.864192, -82.384259	SPM	PM <sub>10</sub>	3	Continuous	Thermo 1405	SOURCE	MIDDLE	SOURCE MONITORING		SU 4/1/1995	
12-057-0100	Kenly	2909 N 66th St, Tampa, FL 33619; 27.970328, -82.380050	SPM	Pb	1	Every 6th Day	Hi-Vol	SOURCE	MIDDLE	SOURCE MONITORING		SU 4/1/2010	
12-057-0109	East Bay	9851 Highway 41 S., Gibsonton, FL 33534; 27.856692,-82.383482	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43C	SOURCE	NBH	SOURCE MONITORING		SU 11/13/1996	
	Davis Island		SLAMS	$SO_2$	1	Continuous	Thermo 43i	POP EXP	NBH	FOR EFFECTIVENESS OF NEW REGULATIONS		SU 1/1/1974	
12-057-1035	(Coast Guard	155 Columbia Dr., Tampa, FL	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USED FOR AQI		SU 1/1/1973	
	Station)	33606; 27.928356, -82.454539	SLAMS	$PM_{10}$	1	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION/USED FOR AQI		SU 12/1/1985	
12-057-1065	USMC Reserve Center	5121 Gandy Blvd, Tampa, FL 33611: 27.89252382.538429	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 9/1/1989	
	Conter		SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	HI CONC	NBH	USED FOR AQI		SU 1/1/2004	
12-057-1066	Gulf Coast Lead	1700 N. 66th St., Tampa, FL	SLAMS	Pb	1	Every 6th Day	ANDERSEN 2000	SOURCE	MIDDLE	SOURCE MONITORING		SU 1/1/2009	
12-057-1073	Patent Scaffolding	33629; 27.960148, -82.381873 6811 E. 14th Avenue, Tampa, FL 33619; 27.96483,- 82.37921	SLAMS SPM	Pb Pb	2	Every 12th Day Every 6th Day	ANDERSEN 2000 Tisch Hi-Vol	SOURCE	MIDDLE	SOURCE MONITORING		SU 1/1/2009 SU 1/1/2009	

			SLAMS	СО	2	Continuous	Thermo 48i-TLE	POP EXP	URBAN	NEEDED BY REGULATION	SU 10/1/2005; Trace level; MET
			SLAMS	$SO_2$	1	Continuous	Thermo 43i-TLE	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004; Trace Level
		SLAMS	$NO_Y$	1	Continuous	Thermo 42i-Y	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004	
			SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004
			SLAMS	$PM_{10}$	1	Every 6th Day	GMW Hi-Vol	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004
12-057-3002	Sydney (NCore 1167 N. Dover Rd., Dover, FL		SLAMS	$PM_{10}$	2	Every 12th Day	GMW Hi-Vol	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004; Collocated monitor
	Site)	33527; 27.965650, -82.230400	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004
			SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo/R&P 2025	POP EXP	URBAN	QA COLLOCATION	SU 1/26/2010; Collocated monitor
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	POP EXP	URBAN	USED FOR AQI	SU 2/14/2014; FEM
			SLAMS	PMCoarse	1	Every 3rd Day	Thermo 2025i	POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004
			STN	EC/OC		Every 3rd Day	URG 3000N	POP EXP	URBAN	BASELINE MONITORING	SU 1/1/2007
			STN	SPEC. PM <sub>2.5</sub>		Every 3rd Day	METONE SASS	POP EXP	URBAN	TRENDS MONITORING	SU 1/1/2004
			NATTS	Toxics				POP EXP	URBAN	NEEDED BY REGULATION	SU 1/1/2004

Pinellas County												
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-103-0004	St. Petersburg	2435 Sharkey Rd., Clearwater, FL 33765; 27.946688, -	SLAMS	Ozone	1	Continuous	Teledyne 400E	HI CONC	URBAN	NEEDED BY REGULATION		SU 7/1/1978
12-105-0004	College	82.731767	SLAMS	PM <sub>2.5</sub>	1	Continuous	Teledyne T640	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU EXPECTED 1/1/2019
12-103-0012	Woodlawn	1313 19th St. N., St. Petersburg, FL 33713; 27.784749, -82.659265	SLAMS	PM <sub>10</sub>	1	Every 6th Day	ANDERSEN 1200	HI CONC	NBH	SOURCE MONITORING		SU 4/1/1992
			SLAMS	NO <sub>2</sub>	1	Continuous	Thermo 42i	HI CONC/ POP EXP	NBH	COMM-WIDE MONITORING		SU 1/1/1978;
			SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USED FOR AQI		SU 4/6/1978
		7200-22 Ave N., St.	SLAMS	$PM_{10}$	2	Continuous	Teledyne T640X	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/1/2018; FEM
12-103-0018	Azalea Park	Petersburg, FL 33701; 27.785866, -82.739875	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/1/1999; SD EXPECTED 7/1/2018
		27.783800, -82.739875	SLAMS	PM <sub>2.5</sub>	3	Continuous	Teledyne T640X	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/1/2018; FEM
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	USED FOR AQI	REPLACED BY FEM	SU 5/1/2001; SD 11/29/2017
			NON-REG	Toxics		Every 6th Day		POP EXP	NBH	BASELINE MONITORING		SU 1/1/2001
12-103-0023	Derby Lane	10100 San Martin Rd., St. Petersburg, FL 33702; 27.863635, -82.623153	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	POP EXP	NBH	TRENDS MONITORING		SU 1/14/1979
12-103-0026	Skyview	8601 60th Street N., Pinellas Park, FL 33702; 27.850041, -	NATTS	BC	1	Continuous	Teledyne API 633	POP EXP	NBH	BASELINE MONITORING		SU 5/20/2016
12-105-0020	SKyview	82.714590	NATTS	Toxics		Every 6th Day		POP EXP	NBH	BASELINE MONITORING		SU 05/20/2016
		6853 25th Street N., St.	SLAMS	CO	1	Continuous	Teledyne T300U	SOURCE	MICRO	SUPPORT NEAR-ROAD		SU 5/20/2016
12-103-0027	Sawgrass Lake Park	Petersburg, FL 33702; 27.834409, -82.665251	SLAMS	NO <sub>2</sub>	1	Continuous	Teledyne T500U	SOURCE	MICRO	NEEDED BY REGULATION		SU 05/20/2016; Near-road Site
			SPM	BC	1	Continuous	Teledyne API 633	SOURCE	MICRO	SUPPORT NEAR-ROAD		SU 05/20/2016
12-103-1009	Sandy Lane	1360 Sandy Lane; Clearwater, FL 33755; 27.986283, - 82.782150	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION	CLOSE	SU 9/12/2003; SD EXPECTED 12/31/2018
12-103-2008	Gateway	13280 34th ST. N., St. Petersburg, FL 33716; 27.892801, -82.680378	SLAMS	СО	1	Continuous	Teledyne T300	HI CONC	MICRO	TRENDS MONITORING		SU 4/1/1993
		1301 Ulmerton Rd., Largo, FL	SLAMS	PM <sub>10</sub>	1	Every 6th Day	GWC 1200	HI CONC	MIDDLE	TRENDS MONITORING		SU 7/31/1988
12-103-3004	County Motorpool	33771; 27.895856, -82.774546	SLAMS	$PM_{10}$	2	Every 12th Day	GWC 1200	HI CONC	MIDDLE	TRENDS MONITORING	CLOSE	SU 12/5/1988; Collocated monitor; SD EXPECTED 7/1/2018
12-103-5002	John Chesnut Sr.	Harbor, FL 34685; 28.090299,	SLAMS	Ozone	1	Continuous	Teledyne 400E	POP EXP	URBAN	USED FOR AQI		SU 1/1/1977
12-105-5002	Park - East Lake	82 700707	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	USED FOR AQI		SU 9/5/2007
12-103-5003	Oakwood	40671 US 19 N., Tarpon Springs, FL 34689; 28.141667, -82.739722	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	SOURCE	NBH	TRENDS MONITORING		SU 9/18/1998

			М	ETROPOLITAN S	TATIS	FICAL AREA: JAC	KSONVILLE (BAKER, C	LAY, DUVAL, NAS	SAU AND ST	. JOHNS COUNTIES)		
							Baker County					-
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-003-0002	Osceola National Forest - Olustee Ranger Station	Hwy 90, Olustee, Forest Service Office, Sanderson, FL 32087; 30.201111, -82.441111	SPM	Ozone	1	Continuous	Thermo 49i	POP EXP/ GEN BKGD	URBAN	REGIONAL BACKGROUND		SU 1/1/1996
		1			1		Duval County		r			T
			SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	HI CONC	NBH	TRENDS MONITORING		SU 1/1/1974
			SLAMS	NO <sub>2</sub>	2	Continuous	Thermo 42i	HI CONC	NBH	COMM-WIDE MONITORING		SU 1/6/1975
12-031-0032	Kooker Park	2900 Bennett St., Jacksonville, FL 32206; 30.355856, -	SLAMS	PM <sub>10</sub>	1	Continuous	Thermo 1405	HI CONC	NBH	NEEDED BY REGULATION		SU 2/1/2008
		81.635581	SPM	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	COMM RESPONSE	REPLACED BY CONTINUOUS MONITOR	SU 7/15/2009; SD EXPECTED 7/1/2018
			SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1405	POP EXP	NBH	COMM RESPONSE	ADD	SU 7/1/2018
12-031-0077	Sheffield Elementary	13333 Lanier Rd., Jacksonville, FL 32226;	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/1979
	-	30.477275, -81.587167	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	USED FOR AQI	07 0 07 D	SU 9/1/2008
12-031-0080	Southside Playground	Jacksonville, FL 32207;	SPM SLAMS	CO SO <sub>2</sub>	1	Continuous Continuous	Thermo 48i Thermo 43i	HI CONC HI CONC	MIDDLE NBH	TRENDS MONITORING SOURCE MONITORING	CLOSE CLOSE	SU 10/18/1979; SD 3/30/2018 SU 1/1/1979; SD 3/30/2018
12-031-0081	Cedar Bay STP	30 300110 81 652341 1080 Cedar Bay Rd., Jacksonville, FL 32218; 30.431222, -81.631627	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	HI CONC	MIDDLE	SOURCE MONITORING	CLUSE	SU 1/1/1979, SD 3/50/2018
		2189 Rosselle St, Jacksonville,	SLAMS	CO	1	Continuous	Thermo 48i	HI CONC	MIDDLE	TRENDS MONITORING	CLOSE	SU 1/1/1980
12-031-0084	Rosselle	FL 32204; 30.320203, - 81.687032	SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	HI CONC	MIDDLE	NEEDED BY REGULATION	CLOSE/RELOCATION	SU 2/11/2008; PM10 monitor will be relocated to Pepsi Place; SD EXPECTED 7/1/2018
12-031-0097	Fort Caroline Road	6241 Fort Caroline Rd., Jacksonville, FL 32277; 30.366891, -81.593965	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	POP EXP	NBH	TRENDS MONITORING	CLOSE	SU 9/7/1991; SD EXPECTED 7/1/2018
12-031-0098	Mandarin Rd Site	14932 Mandarin Rd., Jacksonville, FL 32223;	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION		SU 6/1/1999
12-031-0098	Wandarin Ku She	30.135874, -81.634093	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/2004
12-031-0099	Sunny Acres	9429 Merrill Rd., Jacksonville, FL 32225; 30.354614, -	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	NEEDED BY REGULATION		SU 6/1/1999
		81.547789	SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo/R&P 2025	POP EXP	NBH	QA COLLOCATION		SU 6/1/1999; Collocated monitor
12-031-0100	Mayo Clinic	13600 William Davis Pkwy, Jacksonville, FL 32224;	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 9/1/2002
		30.260420, -81.453341	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	URBAN	USED FOR AQI		SU 1/1/2004
12-031-0106	Cisco Drive	4770 Cisco Dr., Jacksonville, FL 32219; 30.378217, - 81.840900	SPM	Ozone	1	Continuous	Thermo 49i	REGIONAL TRANSPORT	URBAN	USED FOR AQI		SU 9/28/2009
			SLAMS	СО	1	Continuous	Thermo 48i	SOURCE	MIDDLE	NEEDED BY REGULATION		SU 1/1/2014
12-031-0108	Pepsi Place	5895 Pepsi Place, Jacksonville, FL 32319; 30.262730, -	SLAMS	NO <sub>2</sub>	1	Continuous	Thermo 42i	SOURCE	MIDDLE	NEEDED BY REGULATION		SU 1/1/2014; Near-road Site
12-031-0100	r opsi r lace	81.606826	SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	HI CONC	MIDDLE	NEEDED BY REGULATION		SU 2/14/2014; FEM
			SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	HI CONC	MIDDLE	NEEDED BY REGULATION	ADD/RELOCATION	Relocated from Rosselle; SU EXPECTED 12/31/2018
Nassau County												
12-089-0005	Fernandina Beach Waste Water Treatment Plant (FBWWTP)	1007 S 5th St, Fernandina Beach, FL 32304; 30.658552, - 81.463168	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	HI CONC	NBH	NEEDED BY REGULATION		SU 1/1/1976
12-089-0010	Yulee	96160 Nassau Place, Yulee, FL 32097; 30.626950, - 81.535807	SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1405	POP EXP	NBH	REGIONAL BACKGROUND		SU 12/21/2012

	METROPOLITAN STATISTICAL AREA: ORLANDO - KISSIMMEE (LAKE, ORANGE, OSCEOLA AND SEMINOLE COUNTIES)												
							Lake County						
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS	
12-069-0002	Clermont	1901 Johns Lake Rd., Clermont, FL 34711; 28.523889, -81.723333	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	MONITORING EXT COUNTY OF LARGE MET STAT AREA		SU 6/1/2000	
							Orange County						
		525 S. Division Ave, Orlando,	SLAMS	СО	1	Continuous	Thermo 48i	SOURCE	MIDDLE	NEEDED BY REGULATION		SU 7/1/2016; Near-road Site; Temporarily Closed	
12-095-0009	I-4 Near Road	FL 32805; 28.534930, - 81.384247	SLAMS	NO <sub>2</sub>	1	Continuous	Thermo 42i	SOURCE	MIDDLE	NEEDED BY REGULATION		SU 7/1/2016; Near-road Site; Temporarily Closed	
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	SOURCE	MIDDLE	NEEDED BY REGULATION		SU EXPECTED 2/1/2017; FEM; Near-road Site: Temporarily Closed	
12-095-0008	Winegard Elementary School	7055 Winegard Rd., Orlando, FL 32809; 28.454450, - 81.381181	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 9/1/1988	
			SPM	CO	1	Continuous	Thermo 48i	POP EXP	NBH	TRENDS MONITORING		SU 3/23/1978	
			SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	HI CONC	NBH	FOR EFFECTIVENESS OF NEW REGULATIONS		SU 1/1/1976	
	Lake Isle Estates -	213 S. Denning Ave, Winter Park, FL 32789; 28.596389, - 81.362500	SLAMS	NO <sub>2</sub>	1	Continuous	Thermo 42i	POP EXP	URBAN	COMM-WIDE MONITORING		SU 1/1/1981	
12-095-2002	Winter Park		SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 1/1/1976	
			SLAMS	PM10	1	Continuous	Thermo 5014i	POP EXP	NBH	NEEDED BY REGULATION		SU 01/24/2015	
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Thermo 5014i	POP EXP	NBH	NEEDED BY REGULATION		SU 10/1/2016; FEM	
							Osceola County						
12-097-2002	Osceola Co. Fire Station - Four Corners	8706 W Irlo Bronson Memorial Hwy (SR 192), Kissimmee, FL 34747; 28.347509, -81.636464	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	URBAN SPRAWL		SU 9/1/1993	
							Seminole County						
			SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	MONITORING EXT COUNTY OF LARGE MET STAT AREA		SU 1/1/1980	
12 117 1002	Conford.	284-300 Broadmoor Rd., Lake	SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION		SU 12/22/2000	
12-117-1002	Sanford	Mary, FL 32773; 28.746111, - 81.310556	SLAMS	PM <sub>2.5</sub>	1	Every 12th Day	Thermo/R&P 2025	POP EXP	NBH	MONITORING EXT COUNTY OF LARGE MET STAT AREA		SU 1/7/1999; Collocated monitor	
			SLAMS	PM <sub>2.5</sub>	4	Continuous	Teledyne T640	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/1/2018; FEM	

			N	IETROPOLITAN S	STATIS	TICAL AREA: SAF	RASOTA - BRADENTON	- VENICE (MANAT	FEE AND SAI	RASOTA COUNTIES)		
							Manatee County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-081-3002	Port Manatee	1801 Piney Point Rd., Palmetto, FL 34221; 27.637890, -82.547480	SLAMS	Ozone	1	Continuous	2B Tech 202	HI CONC	NBH	NEEDED BY REGULATION		SU 4/1/1992; SD 5/31/2008; SU 6/10/2009
12-081-4012	GT Bray Park	5502 33rd Ave Drive W., Bradenton, FL 34209; 27.475190, -82.618180	SPM	Ozone	1	Continuous	2B Tech 202	POP EXP	NBH	USED FOR AQI		SU 2/1/1999; SD 5/31/2008; SU 6/10/2009
12-081-4013	82.513120		SPM	Ozone	1	Continuous	2B Tech 202	POP EXP	NBH	USED FOR AQI		SU 1/1999; SD 3/31/2008; SU 1/20/2010
12-081-0028	1801 Piney Point Rd.		SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	SOURCE	NBH	NEEDED BY REGULATION		SU 11/5/2013
							Sarasota County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
		4430 S. Lockwood Ridge Rd.	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP/ HI CONC	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/6/1999; SD EXPECTED 7/1/2018
12-115-0013	Bee Ridge Park	Sarasota, FL 34231; 27,290556, -82,507222	SLAMS	PM <sub>2.5</sub>	3	Continuous	Teledyne T640	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/4/2018;
		27.290336, -82.307222	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 5/1/2008; SD 3/31/2018
12-115-1005	Lido Park	450 Micinley Dr., Sarasota, FL 34236; 27.307268, -82.570376	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	NEEDED BY REGULATION		SU 9/5/1989
			SPM	NO <sub>2</sub>	1	Continuous	Teledyne T200	POP EXP	NBH	ASSIST IN FORCASTING		SU 5/1/2000
12-115-1006	Paw Park	4570 17th St., Sarasota, FL	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USED FOR AQI		SU 10/1/1999
	Tun Tun	34235; 27.350278, -82.479722	SLAMS	PM <sub>10</sub>	1	Continuous	Thermo 1400AB	POP EXP	NBH	NEEDED BY REGULATION		SU 9/19/2003; FEM
12-115-2002	Jackson Road	FL 34292; 27.089194, -	SPM	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USED FOR AQI		SU 9/1/2003
12-115-2002	Jackson Koad	82 362583	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	TRENDS MONITORING		SU 4/1/2009

				ME	ETROP	OLITAN STATIST	ICAL AREA: CAPE COR	AL - FORT MYERS	(LEE COUN	TY)		
							Lee County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
			SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION		SU 2/22/2001
12-071-0005	Winkler Pump	1403 Princeton St., Ft. Myers, FL 33901; 26.602016, -	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP/ HI CONC	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/1/1999; SD EXPECTED 7/1/2018
12-071-0005	Station	81.877908	SLAMS	PM <sub>2.5</sub>	3	Continuous	Teledyne T640	POP EXP	NBH	NEEDED BY REGULATION	ADD	SU 1/1/2018
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 1/14/2009; SD 8/3/2017
12-071-2002	Rotary Park	5505 Rose Garden Rd., Cape Coral, FL 33914; 26.548212, - 81.981523	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	USED FOR MAPPING		SU 5/7/2001
12-071-3002	Bay Oaks Park	2731 Oak Street, Ft. Myers Beach, FL 33931; 26.449247, - 81.939256	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC/ POP EXP	URBAN	NEEDED BY REGULATION		SU 12/1/1995
					М	ETROPOLITAN S'	TATISTICAL AREA: LA	KELAND (POLK C	OUNTY)			
							Polk County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-105-6005	Sikes Elementary	2727 Shepard Rd., Lakeland, FL 33811; 27.939746, -	SLAMS	$SO_2$	1	Continuous	Thermo 43i	HI CONC	URBAN	NEEDED BY REGULATION		SU 9/16/2013
	School	82.000084	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	NEEDED BY REGULATION NEEDED BY		SU 6/18/1992
			SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	REGULATION NEEDED BY		SU 6/17/1992
	Baptist Childrens	1015 Sikes Blvd, Lakeland, FL	SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	REGULATION NEEDED BY		SU 10/23/2007
12-105-6006	Home	33815; 28.028889, -81.972222	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	HI CONC	NBH	REGULATION NEEDED BY		SU 1/1/1999; SD EXPECTED 7/1/2018
			SLAMS SPM	PM <sub>2.5</sub>	3	Continuous	Teledyne T640 Thermo 1400AB	POP EXP HI CONC	NBH	REGULATION NEEDED BY	ADD REPLACED BY FEM	SU 1/1/2018 SU 8/30/2007: SD 1/9/2018
										REGULATION		SU 8/30/2007; SD 1/9/2018
			METRO	OPOLITAN STATI	STICAI	L AREA: DELTON		ORMOND BEACH	(FLAGLER A	ND VOLUSIA COUNTIE	S)	
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	Flagler County SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-035-0004	Flagler	208 Sawgrass Rd, Bunnell, FL 32110; 29.489083, -81.276833	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USED FOR AQI/ASSIST IN FORECASTING		SU 8/25/2011
							Volusia County					
12-127-2001	Port Orange	5200 Spruce Creek Rd., Port Orange, FL 32119; 29.109151, -80.993666	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION	CLOSE	SU 1/1/1992; SD 3/31/2018
			SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	NEEDED BY REGULATION		SU 1/1/1992
		1185-A Dunn Ave, Daytona	SLAMS	PM <sub>10</sub>	2	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION		SU 6/26/1998
12-127-5002	Daytona - Blind Services	Beach, FL 32114; 29.206667, - 81.052500	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	HI CONC	URBAN	NEEDED BY REGULATION	REPLACED BY FEM	SU 4/1/2009; SD EXPECTED 7/1/2018
			SLAMS	PM <sub>2.5</sub>	3	Continuous	Teledyne T640	POP EXP	URBAN	NEEDED BY REGULATION	ADD	SU 1/1/2018
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	HI CONC	NBH	NEEDED BY REGULATION	REPLACED BY FEM	SU 12/20/2007; SD 9/19/2017

	METROPOLITAN STATISTICAL AREA: PALM BAY - MELBOURNE - TITUSVILLE (BREVARD COUNTY)													
							Brevard County			,				
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS		
			SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 3/1/2000		
12-009-0007	Melbourne	401 West Florida Ave, Melbourne, FL 32901;	SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	NEEDED BY REGULATION		SU 5/11/2012		
12 005 0007		28.053611, -80.628611	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	HI CONC	NBH	NEEDED BY REGULATION		SU 3/1/2000		
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	NEEDED BY REGULATION		SU 10/25/2007		
12-009-4001	Cocoa Beach	400 S. 4th St., Cocoa Beach, FL 32931; 28.310841, - 80.615330	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 9/18/1988		
			ME	CTROPOLITAN ST	TATIST	ICAL AREA: PENS	ACOLA - FERRY PASS -	BRENT (ESCAMB	IA AND SAN	TA ROSA COUNTIES)				
	METROPOLITAN STATISTICAL AREA: PENSACOLA - FERRY PASS - BRENT (ESCAMBIA AND SANTA ROSA COUNTIES) Escambia County													
AQS #	AQS # SITE NAME ADDRESS/UTM TYPE POLLUTANT POC OPERATING SCHEDULE SAMPLER MONITORING OBJECTIVE SCALE PURPOSE MODIFICATIONS COM													
			SLAMS	$SO_2$	1	Continuous	Thermo 43i	POP EXP	NBH	FOR EFFECTIVENESS OF NEW REGULATIONS		SU 1/1/1976		
12-033-0004	Ellyson Industrial	Ellyson Industrial Park at Copter Rd., Pensacola, FL	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/1975		
12-035-0004	Park	32514; 30.525367, -87.203550	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	HI CONC	NBH	TRANSPORT		SU 1/1/1999		
		,,,	SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo 2025i	HI CONC	NBH	QA COLLOCATION		SU 1/3/1999; Collocated monitor		
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	HI CONC	NBH	NEEDED BY REGULATION	CLOSE	SU 2/1998; SD 6/13/2017		
12-033-0018	Pensacola NAS	21 Cunningham St., Pensacola, FL 32508; 30.368050, - 87.270967	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 10/21/1980		
							Santa Rosa County							
12-113-0015	Woodlawn Beach	Breeze, FL 32563; 30.394133, -	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	USE FOR AQI		SU 3/9/2005		
	Middle School	87.008033	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	USE FOR AQI		SU 2/19/2008		
				METROPOLI	IAN ST	A HISTICAL AREA	: PORT ST. LUCIE - FT	PIERCE (MARTIN	AND ST LUC	LIE COUNTIES)				
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	Martin County SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS		
12-085-0007	Stuart	950 SE Monterey Rd., Stuart, FL 34994; 27,172458, -	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 6/11/2010		
12 000-0007		80.240689	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	USED FOR AQI		SU 6/11/2010		
							St. Lucie County			· · · · · · · · · · · · · · · · · · ·		·		
12-111-0013	Savannas	1420 E Midway Rd., Ft. Pierce, FL 34981; 27.389079, - 80.311033	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	USED FOR AQI		SU 2/24/2011		

				METH	ROPOL	ITAN AREA: TAL	LAHASSEE (LEON, JEF	FERSON AND WAR	KULLA COU	NTIES)		
							Leon County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
			SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 6/13/1998; MET
			SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo 2025i	POP EXP	NBH	NEEDED BY REGULATION		SU 1/1/1999
12-073-0012	Tallahassee	110 Century Park Circle W., Tallahassee, FL 32304;	SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo 2025i	POP EXP	NBH	QA COLLOCATION		SU 10/1/2004, Collocated monitor
12-073-0012	Community College	30.439722, -84.346389	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	NEEDED BY REGULATION		SU 7/14/2003
			STN	EC/OC		Every 6th Day	URG 3000N	POP EXP	URBAN	BASELINE MONITORING		SU 10/4/2009
			STN	SPEC. PM <sub>2.5</sub>		Every 6th Day	METONE SASS	POP EXP	URBAN	TRENDS MONITORING		SU 10/4/2009
							Wakulla County					
			SLAMS	CO	1	Continuous	Teledyne T300U	BKGD	URBAN	RURAL NCORE		SU 4/27/2015; Trace Level; MET
	St. Marks Wildlife		SLAMS	SO <sub>2</sub>	3	Continuous	Teledyne T100U	BKGD	URBAN	RURAL NCORE		SU 1/1/2015; Trace Level
12-129-0001	Refuge (NCore	County Rd. 59, St. Marks, FL	SLAMS	NOy	1	Continuous	Teledyne T200U	BKGD	URBAN	RURAL NCORE		SU 1/1/2015
12-129-0001	Site)	32355; 30.092500, -84.161111	SLAMS	Ozone	1	Continuous	Thermo 49i	REGIONAL TRANSPORT	URBAN	NEEDED BY REGULATION		SU 4/13/2001
			SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	BKGD	URBAN	RURAL NCORE		SU 1/1/2015
				MET	ropol	LITAN STATISTIC	AL AREA: NAPLES - M	ARCO ISLAND (CC	OLLIER COU	JNTY)		
							Collier County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-021-0004	Laurel Oak	7800 Immokalee Rd., Naples, FL 34119; 26.270083, -	SPM	Ozone	1	Continuous	Thermo 49i	POP EXP	URBAN	MONITORING GROWTH IMPACT		SU 9/26/2001
12-021-0004	Elementary	81.710959	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	URBAN	MONITORING GROWTH IMPACT		SU 3/2/2005
					N	IETROPOLITAN S	STATISTICAL AREA: O	CALA (MARION CO	DUNTY)			
							Marion County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-083-0003	Ocala - YMCA	3200 SE 17th St., Ocala, FL 34471; 29.170533, -82.100646	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC/ UPWIND BKGD	NBH	MONITORING GROWTH IMPACT		SU 5/27/1998
		34471, 29.170355, -82.100646	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	POP EXP	NBH	USED FOR AQI		SU 11/27/2007
12-083-0004	Marion County Sheriff	692 NW 30th Ave, Ocala, FL 34475; 29.192754, -82.173149	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	NEEDED BY REGULATION		SU 11/8/2000

				METRO	POLIT	AN STATISTICAL	AREA: GAINESVILLE	(ALACHUA AND G	ILCHRIST (	OUNTY)		
					10211		Alachua County			(00111)		
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-001-0023	Millhopper	Gainesville, FL 32653;	SLAMS	PM <sub>2.5</sub>	1	Every 3rd Day	Thermo/R&P 2025	POP EXP	NBH	TRENDS MONITORING		SU 1/1/1999; SD EXPECTED 7/1/2018
12-001-0023	winnopper	29 706111 _82 387778	SLAMS	PM <sub>2.5</sub>	2	Every 12th Day	Thermo/R&P 2025	POP EXP	NBH	COLLOCATED		SU 1/6/1999; Collocated monitor
12-001-3012	Paynes Prairie	9300 CR 234, Micanopy, FL	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	URBAN	NEEDED BY REGULATION		SU 12/17/2016; Formerly located at 001-3011
12-001-3012	Farm	32667; 29.56615, -82.266066	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1400AB	HI CONC/ POP EXP	NBH	USED FOR AQI		SU 12/17/2016; Formerly located at 001-3011
				METROPOLITA	N STAT	ISTICAL AREA: 1	FORT WALTON BEACH	- CRESTVIEW - DI	ESTIN (OKA	LOOSA COUNTY)		
							Okaloosa County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-091-0002	Fort Walton Beach	720 Lovejoy Rd., Ft. Walton Beach, FL 32548; 30.426533, -	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	URBAN	NEEDED BY REGULATION		SU 12/4/2008
		86.666217	SLAMS	PM <sub>10</sub>	3	Continuous	Thermo 1405	POP EXP	URBAN	USED FOR AQI		SU 1/30/2013
				ME	TROPO	LITAN STATISTI	CAL AREA: PANAMA C	ITY - LYNN HAVEN	N (BAY COUL	NTY)		
Bay County												
AQS #     SITE NAME     ADDRESS/UTM     TYPE     POLLUTANT     POC     OPERATING SCHEDULE     SAMPLER     MONITORING OBJECTIVE     SPATIAL     STATEMENT OF PURPOSE     MODIFICATIONS											COMMENTS	
12-005-0006	St. Andrews State Park	4607 State Park Lane, Panama City, FL 32408; 30.130433, -	SLAMS	Ozone	1	Continuous	Thermo 49i	HI CONC	NBH	NEEDED BY REGULATION		SU 7/13/2000
		85.731517	SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1405	POP EXP	NBH	USED FOR AQI		SU 2/27/2009
					MET	ROPOLITAN STA	TISTICAL AREA - SEBI	RING (HIGHLANDS	COUNTY)			
						OPERATING	Highlands County	MONITORING	SPATIAL	STATEMENT OF		
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	SCHEDULE	SAMPLER	OBJECTIVE	SCALE	PURPOSE	MODIFICATIONS	COMMENTS
12-055-0003	Archbold Biological Station	123 Main Dr., Venus, FL 33960; 27.189215, -81.340350	SPM	Ozone	1	Continuous	Thermo 49i	HI CONC/ GEN BKGD	REGIONAL	REGIONAL BACKGROUND		SU 6/14/2001
	-				M	CROPOLITAN ST	ATISTICAL AREA: PAL	ATKA (PUTNAM C	OUNTY)			• •
							Putnam County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-107-1008	Palatka Barge Port	188 Comfort Rd., Palatka, FL	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	SOURCE	NBH	SOURCE MONITORING		SU 8/15/1991
	- mana Barge Fort	32177; 29.687748, -81.656509	SLAMS	PM10	3	Continuous	Thermo 1405	POP EXP/ SOURCE	NBH	SOURCE MONITORING		SU 12/13/2002
					MIC	ROPOLITAN STAT	FISTICAL AREA: LAKE	CITY (COLUMBIA	COUNTY)			
							Columbia County	MONTODDIG				I
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-023-0002	Lake City - Veterans Domicile	751 SE Sycamore Terrace, Lake City, FL 32025;	SLAMS	Ozone	1	Continuous	Thermo 49i	POP EXP	NBH	MONITOR IMPACT OF HIGH TRAFFIC		SU 11/1/2000
	· cteruns Donnene	30.178056, -82.619167	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	RURAL MONITORING		SU 5/17/2007
				Ν	HCROP	OLITAN STATISI	TCAL AREA: HOMOSA	SSA SPRINGS (CITI	RUS COUNI	(Y)		
						OPEDATING	Citrus County	MONITODDIG	CDATIAT			
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	POC	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-017-0006	Crystal River Preserve	13450 W. Power Line Rd., Crystal River, FL 34428;	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	SOURCE	NBH	NEEDED BY REGULATION		SU 12/13/2013
	11050110	28.958644, -82.642965	SPM	PM <sub>2.5</sub>	1	Continuous	Thermo 1405	POP EXP	NBH	RURAL MONITORING		SU 12/7/2015

						NOT IN A	METROPOLITAN STAT	TISTICAL AREA				
							Holmes County					
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	РОС	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-059-0004	Bonifay Tri-	1976 Tri County Airport Rd., Bonifay, FL 32425;	SPM	Ozone	1	Continuous	Thermo 49i	POP EXP	REGIONAL	REGIONAL BACKGROUND		SU 9/1/1996
12-039-0004	County Airport	30.848611, -85.603889	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	POP EXP	NBH	REGIONAL BACKGROUND		SU 6/14/2007
							Hamilton County					
12-047-0015	White Springs	Southeast CR 137, white Springs, FL 32096;	SLAMS	SO <sub>2</sub>	1	Continuous	Thermo 43i	SOURCE	MIDDLE	SOURCE MONITORING		SU 9/18/1982
12-047-0015	white springs	30 426363 -82 794841	SPM	PM <sub>2.5</sub>	3	Continuous	Thermo 1405	SOURCE	NBH	RURAL MONITORING		SU 5/17/2007
							IMPROVE NETWOR	RK				
AQS #	SITE NAME	ADDRESS/UTM	TYPE	POLLUTANT	РОС	OPERATING SCHEDULE	SAMPLER	MONITORING OBJECTIVE	SPATIAL SCALE	STATEMENT OF PURPOSE	MODIFICATIONS	COMMENTS
12-129-0001		County Rd. 59, St. Marks, FL 32355; 30.092500, -84.161111	SPM	PM <sub>2.5</sub>		Every 3rd Day	IMPROVE	BKGD	URBAN	NEEDED BY REGULATION		SU 2000
12-017-9000	Chassahowitzka National Wildlife Refuge	S Timber Pines Ave., Homosassa, FL 34448; 28.7486, -82.5551	SPM	PM <sub>2.5</sub>		Every 3rd Day	IMPROVE	TRANSPORT	URBAN	NEEDED BY REGULATION		SU 1993
12-086-0030	Everglades National Park	Everglades National Park, FL	SPM	PM <sub>2.5</sub>		Every 3rd Day	IMPROVE	BKGD	URBAN	NEEDED BY REGULATION		SU 1988

## List of Abbreviations:

AQI	Air Quality Index
BKGD	Background
CO	Carbon Monoxide
CSN	Chemical Speciation Network
EC/OC	Elemental Carbon/Organic Carbon
FRM	Federal Reference Method
GEN BKGD	General Background
HI CONC	High Concentration
MET	Implies that wind speed and wind direction instruments are on site
NAMS	National Air Monitoring Stations
NBH	Neighborhood
NCORE	National Core
NO <sub>2</sub>	Nitrogen Dioxide
NON-REG	Non-regulatory Monitoring
POP EXP	Population Exposure
PM <sub>2.5</sub>	Particulate matter with aerodynamic diameter of 2.5 micro meter
PM <sub>10</sub>	Particulate matter with aerodynamic diameter of 10 micro meter
SLAMS	State and Local Air Monitoring Stations
SO <sub>2</sub>	Sulfur Dioxide
SPM	Special Purpose Monitors
SPEC. PM <sub>2.5</sub>	Supplemental PM2.5 Speciation
SD	Shut Down
SU	Set Up
STN	Speciation Trends Network
UFP	Ultra Fine Particle
VOC	Volatile Organic Compound

## **APPENDIX D: AMBIENT AIR MONITORING INVENTORY**

EPA requires an evaluation of the agency's ambient monitors and auxiliary support equipment. The condition of inventory should be categorized as "Good," "Fair" or "Poor," and indicate equipment not in everyday use (e.g. spare or back-up). The ambient monitoring equipment inventories for Florida's monitoring agencies are provided below.

			Broward Cou	nty					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
N/A	ESC 8832	Data Logger	Vista View	A3855K	9/25/2012	6	\$6,350.00	Good	Active
N/A	R&P TEOM 1400AB	Continuous PM2.5	Vista View	140AB267250705	6/18/2007	11	\$18,525.00	Good	Active
N/A	RM Young Windspeed/Wind Dir	WS/WD	Vista View	146400	1/30/2007	11	\$2,008.17	Good	Active
N/A	RM Young T/RH Sensor	T/RH	Vista View	2047	12/19/2011	6	\$1,061.50	Good	Active
N/A	Thermo 49i	O3 Analyzer	Vista View	CM07340001	9/21/2007	11	\$7,681.50	Good	Active
N/A	Thermo 49i-PS	O3 Calibrator	Vista View	727625034	9/21/2007	11	\$10,812.50	Good	Active
N/A	ATEC	VOC Sampler	Daniela Banu	6470	4/6/2017	1	\$13,650.00	Good	Inactive
308796	ESC 8832	Datalogger	Daniela Banu	A3856K	9/25/2012	6	\$6,350.00	Good	Active
N/A	MetOne E-BAMS Plus	PM10 Continuous Monitor	Daniela Banu	W20769	10/4/2017	1	\$10,157.70	Good	Active
N/A	R. M. Young 81000	Sonic Anemometer	Daniela Banu	3485	9/1/2010	8	N/A	Good	Inactive
N/A	Super SASS	CSN Network Super SASS Monitor	Daniela Banu	N9188	6/22/2012	6	\$13,695.50	Good	Active
N/A	Teledyne 701H	HP Zero Air	Daniela Banu	284	2/7/2012	6	\$6,971.70	Good	Active
310908	Teledyne 701H	HP Zero Air (Backup)	Daniela Banu	536	5/14/2015	3	\$5,932.50	Good	Backup
N/A	Teledyne T700U	Dilution Calibrator	Daniela Banu	85	5/14/2015	3	\$20,888.10	Good	Active
N/A	Thermo 5014i	PM2.5 Continuous Monitor	Daniela Banu	CM14191003	9/18/2013	5	\$20,365.00	Good	Active
291694	Thermo 111	Zero Air Supply	Daniela Banu	619317347	5/14/2011	7	\$3,483.00	Good	Active
311329	Thermo 2025i	PM2.5 Manual Sampler Collocated (1-in-12)	Daniela Banu	20262	8/17/2012	6	\$14,373.50	Good	Active
N/A	Thermo 2025i	PM2.5 Manual Sampler Primary (Daily)	Daniela Banu	20450	9/16/2013	5	\$14,373.50	Good	Active
N/A	Thermo 2025i	PM10 Manual Sampler Coarse (Daily)	Daniela Banu	20451	9/16/2013	5	\$13,967.85	Good	Active
322918	Thermo 42i-Y-TLE	NO/NOY/NO <sub>diff</sub>	Daniela Banu	1160570008	9/8/2016	2	\$28,243.09	Good	Active

N/A	Thermo 43i-TLE	SO2 TL	Daniela Banu	1428862875	10/10/2014	4	\$13,377.58	Good	Active
N/A	Thermo 48i-TLE	CO TL	Daniela Banu	1170960053	5/11/2017	1	\$15,616.24	Good	Active
310340	Thermo 49i	O3 Analyzer	Daniela Banu	1113748257	5/17/2011	7	\$8,112.00	Good	Active
296246	Thermo 49i-PS	O3 Calibrator (Backup)	Daniela Banu	727625035	9/21/2007	11	\$10,812.50	Poor	Backup
310341	Thermo 49i-PS	O3 Calibrator	Daniela Banu	1113748258	5/17/2011	7	\$11,194.00	Good	Active
310131	Tisch TE-6070V	PM10 Manual Sampler Collocated (1-in-6)	Daniela Banu	1783	1/20/2011	7	\$6,366.00	Good	Inactive
310130	Tisch TE-6070V	PM10 Manual Sampler Primary (1- in-6)	Daniela Banu	2231	8/2/2012	6	\$7,368.00	Good	Inactive
N/A	URG	CSN Network URG Monitor	Daniela Banu	B0580	1/1/2008	10	N/A	Good	Active
N/A	ESC 8832	Data Logger	Fort Lauderdale Near-road	A4462K	8/9/2013	5	\$7,910.00	Good	Active
N/A	R. M. Young 81000	Sonic Anemometer	Fort Lauderdale Near-road	1759	2/24/2012	6	\$2,606.50	Good	Inactive
N/A	Teledyne 633	Aethalometer	Fort Lauderdale Near-road	AE33-S01-00115	5/17/2012	6	\$21,997.00	Good	Active
N/A	Teledyne 701H	Zero Air Generator	Fort Lauderdale Near-road	569	5/22/2017	1	\$7,210.00	Good	Active
N/A	Teledyne T200UP	Analyzer: NO-NO2 (Trace, Photolytic)	Fort Lauderdale Near-road	60	6/9/2012	6	\$25,119.80	Good	Active
N/A	Teledyne T700U	Dilution Calibrator	Fort Lauderdale Near-road	57	1/25/2011	7	\$18,996.00	Good	Active
N/A	Thermo 5014i	PM2.5 Continuous Monitor	Fort Lauderdale Near-road	CM14481011	11/5/2014	4	\$19,927.31	Good	Active
N/A	Thermo 42i	NO2/NO/NOx	Fort Lauderdale Near-road	1163620012	10/1/2016	2	\$17,700.47	Good	Backup
N/A	Thermo 48i-TLE	CO TL	Fort Lauderdale Near-road	120475128	5/16/2012	6	\$8,697.00	Good	Active
N/A	TSI UFP3031	Analyzer: Continuous Particulates Ultrafine	Fort Lauderdale Near-road	3301202404	10/3/2012	6	\$61,295.00	Good	Active
322942	Vaisala WXT530	Weather Transmitter	Fort Lauderdale Near-road	M3410127	8/24/2016	2	\$3,208.00	Good	Inactive
N/A	ESC 8832	Data Logger	Pompano Highlands	2372	6/1/2012	6	\$7,920.00	Good	Active
N/A	RM Young Windspeed/Wind Dir	WS/WD	Pompano Highlands	154836	5/31/2017	1	\$1,462.00	Good	Active
N/A	Thermo 49i	O3 Analyzer	Pompano Highlands	CM07340004	9/24/2007	11	\$7,681.50	Good	Active

N/A	Thermo 49i-PS	O3 Calibrator	Pompano Highlands	824931779	9/1/2012	5	N/A	Good	Inactive
N/A	Thermo Partisol Plus 2025	PM2.5 Manual Sampler (1-in-3)	Pompano Highlands	22704	3/18/2011	7	\$12,900.00	Poor	Inactive
N/A	Thermo Partisol Plus 2025	PM2.5 Manual Sampler (1-in-3)	Pompano Highlands	22735	6/2/2013	5	\$13,637.80	Good	Active
N/A	Thermo 2025i	PM2.5 Manual Sampler (Daily)	Coconut Creek	20760	3/2/2015	3	\$15,869.97	Good	Active
N/A	Tisch TE-6070V	PM10 Manual Sampler Primary (1- in-6)	Coconut Creek	1782	1/20/2011	7	\$6,366.00	Good	Inactive
N/A	MetOne E-BAMS Plus	PM10 Continuous Monitor	Coconut Creek	W207XX	10/4/2017	1	\$10,157.70	Good	Active
311500	ESC 8832	Data Logger	Dr. Von Mizell- Eula Johnson State Park	A4205K	9/25/2012	6	\$6,350.00	Good	Active
258827	Thermo 111	Zero Air Set	Dr. Von Mizell- Eula Johnson State Park	111-66974-354	12/6/2000	17	\$2,853.00	Good	Active
310233	Thermo 146i	Gas Calibrator	Dr. Von Mizell- Eula Johnson State Park	1107747755	6/13/2011	7	\$12,721.25	Good	Active
N/A	Thermo 42i	NO2/NO/NOx	Dr. Von Mizell- Eula Johnson State Park	1170960054	5/8/2017	1	\$18,032.82	Good	Active
U of Mich. A555472	Thermo 49i	O3 Analyzer	Dr. Von Mizell- Eula Johnson State Park	CM08320015	9/1/2012	6	N/A	Good	Inactive
N/A	Thermo 49i-PS	O3 Calibrator	Dr. Von Mizell- Eula Johnson State Park	1150770008	3/2/2015	3	\$13,333.51	Good	Active
N/A	ESC 8832	Data Logger	Lab	A0603	3/24/2016	2	N/A	Good	Backup
N/A	ESC 8832	Data Logger	Lab	A1289	3/24/2016	2	N/A	Good	Backup
N/A	ESC 8832	Data Logger	Lab	A4206K	9/25/2012	6	\$6,350.00	Good	Backup
N/A	ESC 8832	Data Logger	Lab	A4773K	3/24/2016	2	N/A	Good	Backup
N/A	MetOne BAM-1020	PM10 Continuous Monitor	Lab	P16733	8/19/2013	5	\$16,633.00	Good	Active
N/A	MetOne E-BAMS Plus	Continuous PM10	Lab	W20762	10/4/2017	1	\$10,157.70	NEW	Backup
N/A	RM Young Windspeed/Wind Dir	WS/WD	Lab	154837	10/4/2017	1	\$1,642.00	Good	Active
N/A	Teledyne T100	SO2 Analyzer	Lab	795	6/1/2013	5	\$10,240.00	Poor	Inactive
N/A	Teledyne T700U	Calibrator	Lab	387	5/22/2017	1	\$22,987.90	Poor	Inactive

N/A	Thermo 5014i	PM2.5 Continuous Monitor	Lab	CM16361010	10/14/2016	2	\$22,046.67	Poor	Inactive
N/A	Thermo 146C	Calibrator	Lab	619317386	7/5/2006	12	\$7,924.50	Poor	Backup
N/A	Thermo 42Cy	NO2/NO/NOx	Lab	521342389	9/22/2005	13	\$18,661.00	Poor	Backup
N/A	Thermo 42i	NO2/NO/NOx	Lab	CM08260030	8/6/2008	10	\$10,925.00	Good	Backup
N/A	Thermo 42i-Y-TLE	NO/NOY/NO <sub>diff</sub>	Lab	1171790012	8/21/2017	1	\$32,736.72	NEW	Backup
N/A	Thermo 43i-TLE	SO2 TL	Lab	1171790011	8/1/2017	1	\$16,946.77	NEW	Backup
N/A	Thermo 48C-TLE	CO TL	Lab	05150711728	9/22/2005	13	\$11,655.02	Good	Backup
N/A	Thermo 48i-TLE	CO TL	Lab	824931783	9/1/2012	6	N/A	Poor	Inactive
N/A	Thermo 49i	O3 Analyzer	Lab	CM09080044	4/8/2009	9	\$7,533.50	Fair	Inactive
N/A	Thermo 49i-PS	O3 Calibrator	Lab	1172300029	9/19/2017	1	\$16,357.31	NEW	Backup
N/A	API 401	O3 Calibrator	Storage	96	4/2/1996	22	\$5,625.00	Fair	Inactive
N/A	API 401	O3 Calibrator	Storage	97	4/2/1996	22	\$5,625.00	Fair	Inactive
N/A	API 401	O3 Calibrator	Storage	98	4/2/1996	22	\$5,625.00	Fair	Inactive
N/A	ESC 8832	Data Logger	Storage	A4296K	9/25/2012	6	\$7,910.00	Good	Backup
N/A	Teledyne T100	SO2 Analyzer	Storage	114	4/20/2014	4	N/A	Fair	Inactive
N/A	Teledyne T300	CO Analyzer	Storage	720	6/1/2013	5	\$10,370.00	Good	Inactive
N/A	Thermo 111	Zero Air Generator	Storage	111-66973-354	12/6/2000	17	\$2,853.00	Fair	Inactive
N/A	Thermo 146C	Multigas Calibrator	Storage	146C-78984-390	7/31/2003	15	\$8,691.00	Fair	Active
N/A	Thermo 146C	Multigas Calibrator	Storage	146C-78985-390	7/31/2003	15	\$8,691.00	Fair	Active
N/A	Thermo 146C	Multigas Calibrator	Storage	146C-78986-390	7/31/2003	15	\$8,691.00	Fair	Active
N/A	Thermo 42C-Y	NO2/NO/NOy	Storage	42CY-70622-366	9/1/2012	6	N/A	Fair	Inactive
N/A	Thermo 43C	SO2 Trace Analyzer	Storage	518112306	9/1/2005	13	\$11,940.00	Fair	Inactive
N/A	Thermo 43C	SO2 Analyzer	Storage	TE-43C-74811-377	8/29/2002	16	\$8,640.00	Fair	Inactive
N/A	Thermo 48C	CO Analyzer	Storage	32680149	N/A	N/A	N/A	Fair	Inactive
N/A	Thermo 48C	CO Analyzer	Storage	48C-0515711729	N/A	N/A	N/A	Fair	Inactive
N/A	Thermo 49C	O3 Analyzer	Storage	49C-55284-303	4/2/1996	22	\$6,150.00	Fair	Inactive
N/A	Thermo 49C	O3 Analyzer	Storage	49C-55285-303	4/2/1996	22	\$6,150.00	Fair	Inactive
N/A	Thermo 49C	O3 Analyzer	Storage	49CPS-7569-379	N/A	N/A	N/A	Fair	Inactive
N/A	Thermo 49C-PS	O3 Calibrator	Storage	49CPS-75269-379	11/27/2002	15	\$7,875.00	Fair	Inactive
N/A	Thermo 111	Zero Air Generator	Storage	0619317388	6/6/2006	12	\$3,483.00	Good	Inactive
N/A	Thermo 146i	Multigas Calibrator	Storage	1107747756	6/13/2011	7	\$12,721.25	Good	Inactive

			City of Jackso	nville					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
195340	6100	Calibrator	Kooker Park	5736	2008	10	N/A	Good	Active
197212	2025i	Sampler	Kooker Park	2025i206831409	2014	4	\$16,361.25	Good	Active
2002640	42i - NOX	Analyzer	Kooker Park	1170310010	N/A	N/A	N/A	Good	Active
2002641	43i - SO2	Analyzer	Kooker Park	1170310008	N/A	N/A	N/A	Good	Active
183820	8832	Data Logger	Kooker Park	A1943	2004	14	N/A	Good	Active
172646	COMPUTER	Computer	Kooker Park	KCBX2R7	N/A	N/A	N/A	Fair	Active
199822	TEOM 1405	Sampler	Kooker Park	1405A235831603	2016	8	\$16,890.13	Good	Active
N/A	THINKVISION MONITOR	Monitor	Kooker Park	8894881	N/A	N/A	N/A	Fair	Backup
138479	TRAILER	Trailer	Kooker Park	N/A	1991	27	\$3,697.90	Poor	Active
N/A	49i - OZONE	Analyzer	Sheffield Elementary	1170480025	N/A	N/A	N/A	Good	Active
186857	49i - PS OZONE	Analyzer	Sheffield Elementary	CM09040078	2009	9	\$6,978.40	Good	Active
172529	8832	Data Logger	Sheffield Elementary	A0541	2004	14	N/A	Good	Active
172513	COMPUTER	Computer	Sheffield Elementary	KCRR91M	N/A	N/A	N/A	Fair	Active
N/A	TEOM 1405	Sampler	Sheffield Elementary	1405A230661501	2015	3	\$17,075.00	Good	Active
199821	TEOM 1405	Sampler	Sheffield Elementary	1405A235821603	2016	8	\$16,890.13	Good	Inactive
168912	TRAILER	Trailer	Sheffield Elementary	N/A	N/A	N/A	N/A	Poor	Active
2002228	6100	Calibrator	Southside Playground	7586	2017	1	N/A	Good	Active
2002637	43i - SO2	Analyzer	Southside Playground	1170310006	N/A	N/A	N/A	Good	Active
2002638	48i - CO	Analyzer	Southside Playground	1170310013	N/A	N/A	N/A	Good	Active
189681	8832	Data Logger	Southside Playground	A3937K	2004	14	N/A	Good	Active
172575	COMPUTER IBM	Computer	Southside Playground	KCRR74F	N/A	N/A	N/A	Fair	Active
N/A	TELEDYNE	Zero Air Gen	Southside Playground	5876	2017	1	\$5,236.22	Good	Active

144537	TOXGARD - CO MONITOR	Monitor	Southside Playground	N/A	N/A	N/A	N/A	Fair	Active
138480	TRAILER	Trailer	Southside Playground	N/A	1991	27	\$3,697.90	Poor	Active
189416	6100	Calibrator	Cedar Bay STP	4776	2010	8	\$8,775.00	Good	Active
180789	43i - SO2	Analyzer	Cedar Bay STP	616717186	2006	12	N/A	Good	Active
N/A	8832	Data Logger	Cedar Bay STP	A0538	2004	14	N/A	Good	Active
172512	COMPUTER - IBM	Computer	Cedar Bay STP	KCRZ00A	N/A	N/A	N/A	Fair	Active
144808	TRAILER	Trailer	Cedar Bay STP	N/A	1994	24	\$4,643.20	Poor	Active
2002230	6100	Calibrator	Rosselle	7584	2017	1	N/A	Good	Backup
N/A	48i - CO	Analyzer	Rosselle	1170310014	N/A	N/A	N/A	Good	Active
189680	8832	Data Logger	Rosselle	A3936K	N/A	N/A	N/A	Good	Active
N/A	TELEDYNE	Zero Air Gen	Rosselle	5877	2017	1	\$5,236.22	Good	Active
197613	TEOM 1405	Sampler	Rosselle	1405A230821502	2015	3	\$17,075.00	Good	Active
144536	TOXGARD - CO MONITOR	Monitor	Rosselle	N/A	N/A	N/A	N/A	Fair	Active
175935	TRAILER	Trailer	Rosselle	N/A	2005	13	\$5,755.00	Poor	Active
187085	6100	Calibrator	Fort Caroline	4491	2009	9	\$8,775.00	Good	Active
N/A	43i - SO2	Analyzer	Fort Caroline	1170310007	N/A	N/A	N/A	Good	Active
172522	8832	Data Logger	Fort Caroline	A0586	N/A	N/A	N/A	Good	Active
N/A	COMPUTER	Computer	Fort Caroline	4VGTVN1	N/A	N/A	N/A	Fair	Active
153454	TRAILER	Trailer	Fort Caroline	N/A	N/A	N/A	N/A	Poor	Active
197213	2025i	Sampler	Mandarin	2025i206911409	2014	4	\$16,361.25	Good	Active
171778	8832	Data Logger	Mandarin	A0543	2004	14	N/A	Good	Active
171778	ENCLOSURE	Enclosure	Mandarin	343G-10	N/A	N/A	N/A	Fair	Active
171777	TEOM 1400AB	Sampler	Mandarin	140AB245050303	N/A		N/A	Good	Active
197211	2025i	Sampler	Sunny Acres	2.02512E+13	2014	4	\$16,361.25	Good	Active
197694	2025i DUP	Sampler	Sunny Acres	20251W207931504	2015	3	\$17,050.77	Good	Active
2002639	49i - OZONE	Analyzer	Mayo	1170310016	N/A	N/A	N/A	Good	Active
186858	49i - PS OZONE	Analyzer	Mayo	908935366	2009	9	\$9,416.00	Good	Active
183819	8832	Data Logger	Mayo	A1942	2004	14	N/A	Good	Active
172648	COMPUTER	Computer	Mayo	KCTA57T	N/A	N/A	N/A	Fair	Active
2002360	TELEDYNE	Zero Air Gen	Mayo	5874	2017	1	\$5,236.22	Good	Active
199823	TEOM 1405	Sampler	Mayo	1405A236021603	2016	8	\$16,890.13	Fair	Inactive
153455	TRAILER	Trailer	Mayo	N/A	N/A	N/A	N/A	Poor	Active
186648	111	Zero Air Gen	Cisco Drive	907935555	2009	9	\$3.334.17	Good	Active

197158	49i - OZONE	Analyzer	Cisco Drive	1430863374	2015	3	\$9,640.00	Good	Active
172525	8832	Data Logger	Cisco Drive	A0547	2004	14	N/A	Good	Active
N/A	COMPUTER - DELL OPTIPLEX	Computer	Cisco Drive	79NP1B1	N/A	N/A	N/A	Fair	Active
184190	TRAILER	Trailer	Cisco Drive	N/A	2009	9	\$5,191.10	Good	Active
2002229	6100	Calibrator	Pepsi Place	7585	2017	1	N/A	Good	Active
N/A	42i - NOX	Analyzer	Pepsi Place	1170310009	N/A	N/A	N/A	Good	Active
195338	48i - CO	Analyzer	Pepsi Place	1308857434	2014	4	\$12,467.00	Good	Active
197615	5014i	Sampler	Pepsi Place	CM14501004	2015	3	\$16,880.00	Good	Active
195342	701H	Zero Air Gen	Pepsi Place	753	N/A	N/A	N/A	Good	Active
195341	8832	Data Logger	Pepsi Place	A4688K	2014	4	N/A	Good	Active
184695	COMPUTER - DELL LATITUDE D630	Computer	Pepsi Place	BPVYZF1	N/A	N/A	N/A	Fair	Active
195345	COMPUTER RACK	Rack	Pepsi Place	N/A	N/A	N/A	N/A	Good	Active
195346	COMPUTER RACK	Rack	Pepsi Place	N/A	N/A	N/A	N/A	Good	Activ
184695	LAPTOP - THINKPAD PPL	Computer	Pepsi Place	BPVYZF1	N/A	N/A	N/A	Fair	Activ
195344	MET SENSOR	Met Sensor	Pepsi Place	N/A	N/A	N/A	N/A	Fair	Activ
195347	MET TOWER	Met Tower	Pepsi Place	N/A	N/A	N/A	N/A	Fair	Activ
195343	TRAILER	Trailer	Pepsi Place	N/A	N/A	N/A	N/A	Good	Activ
167681	COMPUTER - DELL 1400	Computer	Cubicle	N/A	N/A	N/A	N/A	Fair	Activ
162147	COMPUTER - DELL XPS R400	Computer	Cubicle	GDKR0	N/A	N/A	N/A	Fair	Activ
180783	COMPUTER - THINK CENTRE	Computer	Cubicle	LKKL5G	N/A	N/A	N/A	Fair	Activ
177084	HP LASER JET 2430DRN	Printer	Cubicle	N/A	N/A	N/A	N/A	Fair	Backu
N/A	LAPTOP - THINKPAD (ALVIN)	Computer	Cubicle	R9-EBZK1	N/A	N/A	N/A	Fair	Activ
105038	OLFACTOMETER	Olfactometer	File Room	N/A	N/A	N/A	N/A	Poor	Backu
105039	OLFACTOMETER	Olfactometer	File Room	N/A	N/A	N/A	N/A	Poor	Backı
189417	6100	Calibrator	Lab	4775	2010	8	\$8,775.00	Fair	Backı
197600	6100	Calibrator	Lab	6508	2015	3	\$8,887.50	Fair	Backı
182787	6100	Calibrator	Lab	3886	N/A	N/A	N/A	Fair	Back
182786	6100	Calibrator	Lab	3887	N/A	N/A	N/A	Fair	Back
184538	6100	Calibrator	Lab	4306	N/A	N/A	N/A	Fair	Back
184536	6100	Calibrator	Lab	4312	N/A	N/A	N/A	Fair	Backu

197599	6100	Calibrator	Lab	6509	2015	3	\$8,887.50	Fair	Backup
183596	2025	Sampler	Lab	2025B219720706	N/A	N/A	N/A	Fair	Backup
188994	42i - NOX	Analyzer	Lab	817630890	2010	8	\$11,304.56	Fair	Backup
N/A	42i - NOX	Analyzer	Lab	1015241586	N/A	N/A	N/A	Fair	Backup
195337	42i - NOX	Analyzer	Lab	1327059041	N/A	N/A	N/A	Good	Backup
172824	43C - SO2	Analyzer	Lab	421007303	N/A	N/A	N/A	Poor	Inactive
175613	43C - SO2	Analyzer	Lab	436610194	N/A	N/A	N/A	Fair	Inactive
184697	43C - SO2	Analyzer	Lab	43C-75636-380	N/A	N/A	N/A	Fair	Inactive
176660	43i - SO2	Analyzer	Lab	520811801	N/A	N/A	N/A	Fair	Backup
179549	43i - SO2	Analyzer	Lab	600914730	N/A	N/A	N/A	Unknown	Backup
193321	43i - SO2	Analyzer	Lab	1225154501	2012	6	\$10,967.50	Poor	Inactive
197214	43i - SO2	Analyzer	Lab	1436363426	2014	4	\$12,457.00	Good	Backup
167934	48C - CO	Analyzer	Lab	48C-67479-356	N/A	N/A	N/A	Good	Backup
167932	48C - CO	Analyzer	Lab	48C-67941-356	N/A	N/A	N/A	Fair	Inactive
167935	48C - CO	Analyzer	Lab	48C-67941-359	2001	17	\$8,559.00	Poor	Inactive
N/A	48C - CO TRACE	Analyzer	Lab	48CTL-67186-356	N/A	N/A	N/A	Fair	Inactive
180679	48i - CO	Analyzer	Lab	611616470	N/A	N/A	N/A	Fair	Inactive
193160	48i - CO	Analyzer	Lab	1216753230	N/A	N/A	N/A	Fair	Inactive
197215	48i - CO	Analyzer	Lab	1436363425	2014	4	\$12,467.00	Poor	Backup
199824	48i - CO	Analyzer	Lab	11606000006	2016	8	\$12,785.75	Good	Backup
174139	49C - O3	Analyzer	Lab	423707710	2004	14	\$6,354.00	Fair	Inactive
174138	49C - O3	Analyzer	Lab	423707712	2004	14	\$6,354.00	Fair	Inactive
174133	49C - PS	Analyzer	Lab	423707707	2004	14	\$8,127.00	Fair	Inactive
180678	49i - OZONE	Analyzer	Lab	611616471	N/A	N/A	N/A	Fair	Inactive
186855	49i - OZONE	Analyzer	Lab	CM09040077	2009	9	\$6,978.40	Fair	Backup
186856	49i - OZONE	Analyzer	Lab	CM09040078	2009	9	\$6,978.40	Fair	Inactive
138481	49i - PS OZONE	Analyzer	Lab	1225154500	2012	6	\$11,233.50	Fair	Backup
195339	5014i	Sampler	Lab	CM13351001	2014	4	\$15,213.66	Fair	Backup
172516	8832	Data Logger	Lab	A0540	N/A	N/A	N/A	Fair	Inactive
N/A	8832	Data Logger	Lab	A0542	N/A	N/A	N/A	Fair	Backup
172526	8832	Data Logger	Lab	A0544	N/A	N/A	N/A	Fair	Inactive
172517	8832	Data Logger	Lab	A0545	N/A	N/A	N/A	Fair	Backup
172518	8832	Data Logger	Lab	A0546	N/A	N/A	N/A	Fair	Good
172528	8832	Data Logger	Lab	A0549	N/A	N/A	N/A	Fair	Good
172527	8832	Data Logger	Lab	A0548	N/A	N/A	N/A	Fair	Inactive

172524	8832	Data Logger	Lab	A0587	N/A	N/A	N/A	Fair	Backup
184118	DEFINER 220 H	Flow Standard	Lab	112786	N/A	N/A	N/A	Good	Active
65951	DIAL-A-VOLT	Voltage Supply	Lab	802	N/A	N/A	N/A	Good	Active
167292	HP LASER JET 2100	Printer	Lab	USGZ182467	N/A	N/A	N/A	Fair	Backup
164189	HP LASER JET 2101	Printer	Lab	N/A	N/A	N/A	N/A	Fair	Backup
173297	IBM - THINKPAD	N/A	Lab	99-RZNFH	N/A	N/A	N/A	Fair	Active
162935	MANOMETER	Manometer	Lab	11MN02	N/A	N/A	N/A	Fair	Backup
186859	N/A	Air Compressor	Lab	N/A	2009	9	\$1,225.17	Fair	Backup
106278	N/A	Balance	Lab	3411155	N/A	N/A	N/A	Poor	Inactive
189418	O3 PS - 6103	O3 Ps - 6103	Lab	4781	N/A	N/A	N/A	Fair	Backup
N/A	OPTI PLEX 780	Opti Plex 780	Lab	CCFVVN1	N/A	N/A	N/A	Fair	Active
171440	SONIC ANEMOMETER	Sonic Anemometer	Lab	N/A	N/A	N/A	N/A	Poor	Inactive
171441	SONIC ANEMOMETER	Sonic Anemometer	Lab	N/A	N/A	N/A	N/A	Poor	Inactive
171442	SONIC ANEMOMETER	Sonic Anemometer	Lab	N/A	N/A	N/A	N/A	Poor	Inactive
116737	SUPPLY CABINET - METAL	Supply Cabinet - Metal	Lab	N/A	N/A	N/A	N/A	Fair	Active
186647	TE 111	Zero Air Gen	Lab	N/A	N/A	N/A	N/A	Fair	Inactive
N/A	TE 1400A	Sampler	Lab	140AB267240705	N/A	N/A	N/A	Fair	Inactive
188469	TE 1400AB	Sampler	Lab	140AB275771001	N/A	N/A	N/A	Fair	Inactive
N/A	TE RP 1400A	Sampler	Lab	140AB267570706	N/A	N/A	N/A	Fair	Inactive
171776	TEOM 1400	Sampler	Lab	140AB245080303	N/A	N/A	N/A	Fair	Inactive
125742	TOXGARD - CO MONITOR	Monitor	Lab	N/A	N/A	N/A	N/A	Fair	Active
144535	TOXGARD - CO MONITOR	Monitor	Lab	N/A	N/A	N/A	N/A	Fair	Active
144809	TRAILER	Trailer	Water lab (temp)	N/A	1994	24	\$4,643.20	Poor	Inactive

			<b>Florida</b>	DEP					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
88409	WELLS CARGO	20' Wells Cargo Trailer	Osceola National Forest - Olustee Ranger Station	1WC200J1153030 266	12/12/1994	23	\$9,074.93	Good	Active
89330	WELLS CARGO	20' Wells Cargo Trailer	Savannas	N/A	12/12/1994	23	\$9,074.93	Good	Active
89695	ALUMA TOWER	Met Towers	Bonifay Tri-County Airport	N/A	10/20/1994	23	\$1,300.00	Good	Active
89696	ALUMA TOWER	Met Tower	Osceola National Forest - Olustee Ranger Station	AT5418F-10-B	10/20/1994	23	\$1,300.00	Good	Active
89697	ALUMA TOWER	Aluminum Crankup Towers	Savannas	N/A	10/20/1994	23	\$1,300.00	Good	Active
89717	WELLS CARGO	20' Wells Cargo Trailer Dep3344	Sanford	1WC200J16R3028 877	8/15/1994	23	\$9,074.93	Good	Active
89802	BIOS Drycal	Mass Volume Flow Calibrator	MRAS Shop D101A	B0255	12/17/1994	23	\$3,185.73	Good	Backup
89804	BIOS Drycal	Mass Volume Flow Calibrator Drycal	MRAS Shop D101A	B0252	12/17/1994	23	\$3,185.74	Good	Backup
90594	WELLS CARGO	20' Wells Cargo Trailer Dep24124	Daytona Blind Services	1WC200J10R3029 641	8/15/1994	23	\$9,074.93	Good	Active
93279	ALUMA TOWER	Alum. Crankup Tower	Ellyson Industrial Park	N/A	9/1/1995	22	\$1,387.99	Good	Active
93280	ALUMA TOWER	Alum. Crankup Tower	Paynes Prairie Farm	N/A	9/1/1995	22	\$1,388.00	Good	Active
93281	ALUMA TOWER	Alum. Crankup Tower	Bay Oaks Park	N/A	9/1/1995	22	\$1,388.00	Good	Active
93883	WELLS CARGO	20' Wells Cargo Trailer Dep3344	Paynes Prairie Farm	1WC200J16T3034 007	6/21/1996	21	\$9,381.00	Good	Active
93884	WELLS CARGO	20' Wells Cargo Trailer Dep3344	Cocoa Beach	1WC200J18T3034 008	6/21/1996	21	\$9,381.00	Good	Active
99069	BIOS Drycal	Drycal Kit	MRAS Shop D101A	B-678	2/3/1998	20	\$3,638.89	Good	Backup
99070	BIOS Drycal	Drycal Kit	MRAS Shop D101A	B-8680	2/3/1998	20	\$3,638.88	Good	Backup
99914	WELLS CARGO	98 Wells Cargo Trailer Dep4132	Tallahassee Community College	1WC200J11W303 9118	3/25/1998	20	\$9,930.00	Good	Active
100505	ALUMA TOWER	Met Tower	Rotary Park	N/A	11/19/1997	20	\$1,617.35	Good	Active
100506	ALUMA TOWER	Met Tower	Tallahassee Community College	N/A	11/19/1997	20	\$1,617.36	Good	Active

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100507	ALUMA TOWER	Aluminum Crankup Tower	Ocala YMCA	AT-71198-102-3	11/19/1997	20	\$1,617.36	Good	Active
103620	THERMO 2025	Model 2025 Sequential Air Sampler	MRAS Shop D101A	2025A208979810	1/5/1999	19	\$13,489.80	Good	Backup
104332	WELLS CARGO	1999 Wells Cargo Utility Trailer Dep4606	Fernandina Beach Waste Water Treatment Plant	1WC200J12X3042 742	11/10/1999	18	\$7,660.00	Good	Active
104333	WELLS CARGO	1999 Wells Cargo Utility Trailer Dep4608	White Springs	1WC200J14X3042 743	11/10/1999	18	\$7,660.00	Good	Active
104334	WELLS CARGO	1999 Wells Cargo Utility Trailer Dep4609	Melbourne	1WC200J16X3042 744	11/10/1999	18	\$7,660.00	Good	Active
105200	CHINOOK Streamline FTS	Streamline/Manometer	MRAS Shop D101A	57-004506-00001	12/14/1999	18	\$1,095.00	Good	Backup
105740	ENVIRONICS 6103	Multi-Gas Calibrator	Standards Lab Room B105	2910	10/23/2002	15	\$11,365.84	Good	Active
106605	BIOS Drycal	Flow Meter Kit Drycal	MRAS Shop D101A	1241	7/31/2002	15	\$3,147.25	Good	Backup
106606	BIOS Drycal	Flow Meter Kit	MRAS Shop D101A	1242	7/31/2002	15	\$3,147.25	Good	Backup
106634	ALUMA TOWER	Crank-Up Tower 10M	Melbourne	AT91204-L1-#4	1/28/2000	18	\$1,590.00	Good	Active
106635	ALUMA TOWER	Met Tower - Test	White Springs	N/A	1/28/2000	18	\$1,590.00	Good	Active
106636	ALUMA TOWER	Met Tower	Fernandina Beach Waste Water Treatment Plant	N/A	1/28/2000	18	\$1,590.00	Good	Active
106637	ALUMA TOWER	Crank-Up Tower 10M	Fort Walton Beach	N/A	1/28/2000	18	\$1,590.00	Good	Active
106638	ALUMA TOWER	Met Tower	Marion County Sherriff	AT91204-L1-1	1/28/2000	18	\$1,590.00	Good	Active
106639	ALUMA TOWER	Met Tower	Clermont	AT91204-L1-#8	1/28/2000	18	\$1,590.00	Good	Active
12/19/2191	ALUMA TOWER	Met Tower	Lake City Veteran's Domicile	AT-91204-4	1/28/2000	18	\$1,590.00	Good	Active
106642	ALUMA TOWER	Met Tower	St. Andrews State Park	AT91204-L1-#9	1/28/2000	18	\$1,590.00	Good	Active
106643	ALUMA TOWER	Met Tower	Woodlawn Beach Middle School	N/A	1/28/2000	18	\$1,590.00	Good	Active
106644	ALUMA TOWER	Met Tower	San Antonio	N/A	1/28/2000	18	\$1,590.00	Good	Active
106672	THERMO 1400	TEOM 1400A PM-10 Monitor System	Melbourne	140AB227819911	1/13/2000	18	\$18,961.69	Good	Active

106674	THERMO 1400	TEOM PM-10/PM2.5	MRAS Shop D101A	140AB227859911	1/13/2000	18	\$18,961.67	Good	Backup
106801	BIOS Drycal	(Sharp cut) Flow Meter Kit Drycal Standard	MRAS Shop D101A	B936	1/10/2000	18	\$3,261.00	Good	Backup
107471	CHINOOK Streamline FTS	Flow Transfer Standard Fts	MRAS Shop D101A	991101	11/3/2000	17	\$1,120.00	Good	Backup
108995	BGI Trical	Audit Device W/Temperature Probe	MRAS Shop D101A	000066	12/12/2002	15	\$2,020.00	Good	Backup
108997	BGI Trical	Audit Device W/Temperature Probe	MRAS Shop D101A	000667	12/12/2002	15	\$2,020.00	Good	Backup
109126	BGI Trical	Audit Device W/Temperature Probe	MRAS Shop D101A	000068	12/12/2002	15	\$2,020.00	Good	Backup
109177	BGI Trical	Audit Device W/Temperature Probe	MRAS Shop D101A	N/A	12/12/2002	15	\$2,020.00	Good	Backup
109218	THERMO 1400	TEOM 1400A PM10 Monitor	MRAS Shop D101A	140AB234100012	3/20/2001	17	\$16,975.00	Good	Backup
109220	THERMO 1400	TEOM 1400A PM10 Monitor	MRAS Shop D101A	140AB233280011	3/20/2001	17	\$16,975.00	Good	Backup
109632	N/A	Gas Pressure Regulator	Standards Lab Room B105	548717	3/22/2001	17	\$1,192.16	Good	Active
109633	N/A	Gas Pressure Regulator	Standards Lab Room B105	535908	3/22/2001	17	\$1,192.15	Good	Active
109634	N/A	Gas Pressure Regulator	Standards Lab Room B105	535888	3/22/2001	17	\$1,192.15	Good	Active
109635	CHINOOK Streamline FTS	Audit Flow Kit	Standards Lab Room B105	LF-1	3/21/2001	17	\$1,127.50	Good	Active
109636	CHINOOK Streamline FTS	Audit Flow Kit	Standards Lab Room B105	LF-2	3/21/2001	17	\$1,127.50	Good	Active
109637	CHINOOK Streamline FTS	Audit Flow Kit	Standards Lab Room B105	LF-3	3/21/2001	17	\$1,127.50	Good	Active
109638	CHINOOK Streamline FTS	Audit Flow Kit	Standards Lab Room B105	LF-4	3/21/2001	17	\$1,127.50	Good	Active
109727	EKTO	Outdoor Cabinet	MRAS Shop D101A	3200-13A	3/20/2001	17	\$4,795.00	Good	Backup
109912	N/A	Gas Rotary Dresser Roots Acc Test	Standards Lab Room B416	0120524	4/3/2001	17	\$2,225.00	Good	Active
110129	WELLS CARGO	Wells Cargo Utility Trailer Dep5299	Yulee	1WC200E1733049 495	2/24/2003	15	\$10,277.00	Good	Active

110689	ALUMA TOWER	Aluminum Crankup Tower W/T-Base	Archbold Biological Station	N/A	8/27/2001	16	\$1,660.00	Good	Active
110690	ALUMA TOWER	Aluminum Crankup Tower W/T-Base	Crystal River Preserve	N/A	8/27/2001	16	\$1,660.00	Good	Active
110691	ALUMA TOWER	Aluminum Crankup Tower W/T-Base	Palatka Barge Port	N/A	8/27/2001	16	\$1,660.00	Good	Active
110946	THERMO 1400	TEOM 1400A PM10 Monitor	MRAS Shop D101A	140AB235430103	5/8/2001	17	\$19,902.50	Good	Backup
111487	THERMO 1400	TEOM 1400A PM10 Monitor	MRAS Shop D101A	140AB238020110	11/13/2001	16	\$8,497.50	Good	Backup
112109	THERMO 1400	TEOM 1400A PM-2.5 Monitor	Melbourne	14AB239110201	2/7/2002	16	\$17,610.00	Good	Active
112110	WELLS CARGO	8X20 Wells cargo Storage Trailer Dep5580	Bonifay Tri-County Airport	1WC200J2223047 926	1/22/2002	16	\$10,812.00	Good	Active
113644	N/A	Gas Pressure Regulator	Standards Lab Room B105	622964	6/17/2002	15	\$1,190.00	Good	Active
113645	N/A	Gas Pressure Regulator	Standards Lab Room B105	658809	6/17/2002	15	\$1,190.00	Good	Active
113646	N/A	Gas Pressure Regulator	Standards Lab Room B105	658827	6/17/2002	15	\$1,190.00	Good	Active
114162	THERMO 1400	TEOM 1400A PM10 Monitor	MRAS Shop D101A	140AB242930209	1/6/2003	15	\$17,245.00	Good	Backup
114706	ENVIRONICS 6103	Multigas Calibrator Environics 6103	Standards Lab Room B105	3046	2/19/2003	15	\$11,366.63	Good	Active
114707	ENVIRONICS 6103	Calibrator Environics	Standards Lab Room B105	3062	2/19/2003	15	\$11,366.63	Good	Active
115096	ENVIRONICS 6103	Multi-Gas Calibrator Series 6103	Standards Lab Room B105	3064	4/14/2003	15	\$11,366.65	Good	Active
115149	ATLANTIC SCIENTIFIC	Lightening Protection System	Yulee	N/A	1/6/2003	15	\$2,334.00	Good	Active
115150	ATLANTIC SCIENTIFIC	Lightening Protection System	Osceola Co. Fire Station - Four Corners	N/A	1/6/2003	15	\$2,334.00	Good	Active
115151	ATLANTIC SCIENTIFIC	Lightening Protection System	Clermont	202103112	1/6/2003	15	\$2,334.00	Good	Active
115152	ATLANTIC SCIENTIFIC	Lightening Protection System	MRAS Shop D101A	N/A	1/6/2003	15	\$2,334.00	Good	Backup

115153	ATLANTIC SCIENTIFIC	Lightening Protection System	Palatka Barge Port	N/A	1/6/2003	15	\$2,334.00	Good	Active
115154	ATLANTIC SCIENTIFIC	Lightening Protection System	Paynes Prairie Farm	N/A	1/6/2003	15	\$2,334.00	Good	Active
115155	ATLANTIC SCIENTIFIC	Lightening Protection System	MRAS Shop D101A	202103451	1/6/2003	15	\$2,334.00	Good	Backup
115156	ATLANTIC SCIENTIFIC	Lightening Protection System	Bay Oaks Park	N/A	1/6/2003	15	\$2,334.00	Good	Active
115157	ATLANTIC SCIENTIFIC	Lightening Protection System	MRAS Shop D101A	N/A	1/6/2003	15	\$2,334.00	Good	Backup
115158	ATLANTIC SCIENTIFIC	Lightening Protection System	Tallahassee Community College	N/A	1/6/2003	15	\$2,334.00	Good	Active
115159	ATLANTIC SCIENTIFIC	Lightening Protection Sys	Ellyson Industrial Park	N/A	2/25/2003	15	\$4,599.75	Good	Active
115507	THERMO 1400	TEOM 1400A PM2.5	MRAS Shop D101A	140AB245470304	5/13/2003	15	\$17,660.00	Good	Backup
115508	THERMO 1400	TEOM 1400A PM2.5	MRAS Shop D101A	140AB245490304	5/13/2003	15	\$17,660.00	Good	Backup
117235	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Osceola National Forest - Olustee Ranger Station	N/A	5/23/2003	15	\$2,421.67	Good	Active
117236	ATLANTIC SCIENTIFIC	Lightning Protection Kit	San Antonio	N/A	5/23/2003	15	\$2,421.67	Good	Active
117237	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Laurel Oak Elementary	N/A	5/23/2003	15	\$2,421.66	Good	Active
117393	N/A	Calibration Bath	Standards Lab Room B105	803050076	6/5/2003	14	\$9,972.90	Good	Active
117909	N/A	Calibration Equipment	Standards Lab Room B105	N/A	7/31/2003	14	\$3,047.00	Good	Active
117940	NOVA-LYNX	Handheld Barometer	MRAS Shop D101A	976370-T2	6/19/2003	14	\$1,404.94	Good	Backup
119263	ESC 8832	Data Logger	MRAS Shop D101A	A0457	8/12/2004	13	\$6,270.00	Good	Inactive
119264	ESC 8832	Data Logger	MRAS Shop D101A	A0458	8/12/2004	13	\$6,270.00	Good	Inactive
119266	ESC 8832	Data Logger	Crystal River Preserve	A0464	8/12/2004	13	\$6,270.00	Good	Active
119267	ESC 8832	Data Logger	MRAS Shop D101A	A0465	8/12/2004	13	\$6,270.00	Good	Inactive
119269	ESC 8832	Data Logger	Sikes Elementary School	A0467	8/12/2004	13	\$6,270.00	Good	Active
119270	ESC 8832	Data Logger	Ocala YMCA	A0473	8/12/2004	13	\$6,270.00	Good	Active
119271	ESC 8832	Data Logger	MRAS Shop D101A	A0487	8/12/2004	13	\$6,270.00	Good	Inactive

119274	ESC 8832	Data Logger	Cocoa Beach	A0490	8/12/2004	13	\$6,270.00	Good	Active
119274	ESC 8832	Data Logger	Port Manatee	A0490	8/12/2004	13	\$6,270.00	Good	Active
119275	ESC 8832	Data Logger	MRAS Shop D101A	A0491	8/12/2004	13	\$6,270.00	Good	Inactive
119278	ESC 8832	Data Logger	MRAS Shop D101A MRAS Shop D101A	A0492	8/12/2004	13	\$6,270.00	Good	Inactive
119278	ESC 8832	Data Logger	Savannas	A0494	8/12/2004	13	\$6,270.00	Good	Active
119280	ESC 8832	Data Logger	Osceola Co. Fire Station - Four Corners	A0496	8/12/2004	13	\$6,270.00	Good	Active
119283	ESC 8832	Data Logger	MRAS Shop D101A	A0589	8/12/2004	13	\$6,270.00	Good	Inactive
119284	ESC 8832	Data Logger	Laurel Oak Elementary	A0590	8/12/2004	13	\$6,270.00	Good	Active
119285	ESC 8832	Data Logger	Woodlawn Beach Middle School	A0591	8/12/2004	13	\$6,270.00	Good	Active
119286	ESC 8832	Data Logger	Bay Oaks Park	A0592	8/12/2004	13	\$6,270.00	Good	Active
119287	ESC 8832	Data Logger	Holiday	A0593	8/12/2004	13	\$6,270.00	Good	Active
119288	ESC 8832	Data Logger	San Antonio	A0594	8/12/2004	13	\$6,270.00	Good	Active
119289	ESC 8832	Data Logger	MRAS Shop D101A	A0595	8/12/2004	13	\$6,270.00	Good	Inactive
119290	ESC 8832	Data Logger	Bonifay Tri-County Airport	A0596	8/12/2004	13	\$6,270.00	Good	Active
119291	ESC 8832	Data Logger	Clermont	A0597	8/12/2004	13	\$6,270.00	Good	Active
119293	ESC 8832	Data Logger	Marion County Sherriff	A0599	8/12/2004	13	\$6,270.00	Good	Active
119294	ESC 8832	Data Logger	MRAS Shop D101A	A0600	8/12/2004	13	\$6,270.00	Good	Inactive
119295	ESC 8832	Data Logger	Paynes Prairie Farm	A0601	8/12/2004	13	\$7,220.00	Good	Active
119296	ESC 8832	Data Logger	Rotary Park	A0602	8/12/2004	13	\$7,220.00	Good	Active
119297	ESC 8832	Data Logger	MRAS Shop D101A	A0603	8/12/2004	13	\$7,220.00	Good	Inactive
120171	CHINOOK Streamline FTS	Dual Flow Streamline /Manometer	MRAS Shop D101A	HL1	4/19/2004	14	\$1,878.00	Good	Backup
120172	CHINOOK Streamline FTS	Dual Flow Streamline / Manometer	MRAS Shop D101A	HL2	4/19/2004	14	\$1,878.00	Good	Backup
121305	ENVIRONICS 6103	Gas Calibrator	Standards Lab Room B105	3285	9/1/2004	13	\$12,838.50	Good	Active
121345	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Fort Walton Beach	N/A	9/27/2004	13	\$2,810.81	Good	Active
121346	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Baptist Children's Home	N/A	9/27/2004	13	\$2,810.81	Good	Active
121347	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Fernandina Beach Waste Water Treatment Plant	N/A	9/27/2004	13	\$2,810.81	Good	Active

121348	ATLANTIC SCIENTIFIC	Lightning Protection Kit	Holiday	N/A	9/27/2004	13	\$2,810.81	Good	Active
121817	THERMO 1400	Air Monitor	Paynes Prairie Farm	140AB253230409	11/12/2004	13	\$17,460.00	Good	Active
121818	THERMO 1400	Air Monitor	MRAS Shop D101A	140AB253240409	11/12/2004	13	\$17,460.00	Good	Backup
121819	THERMO 1400	Air Monitor	Stuart	140AB253250409	11/12/2004	13	\$17,460.00	Good	Active
121882	CHINOOK Streamline FTS	Dual Flow Streamline/Manometer	MRAS Shop D101A	HL3	10/8/2004	13	\$1,879.00	Good	Backup
121883	CHINOOK Streamline FTS	Dual Flow Streamline/Manometer	MRAS Shop D101A	HL4	10/8/2004	13	\$1,879.00	Good	Backup
122188	NOVA-LYNX	Novalynx Manometer	MRAS Shop D101A	995472U1	8/23/2004	13	\$1,404.69	Good	Backup
124178	WELLS CARGO	Wells Cargo Tote Wagon(Ep-6095)	MRAS Shop D101A	1WC200E2353053 636	5/16/2005	13	\$9,534.25	Good	Backup
124762	FLUKE	Fluke Kit-715/87-5E Calibrator 715	MRAS Shop D101A	8881043	6/9/2005	12	\$1,081.00	Good	Backup
124764	FLUKE	Fluke Kit-715/87-5E Calibrator 715	Ellyson Industrial Park	8767074	6/9/2005	12	\$1,081.00	Good	Active
125012	THERMO 2025	Partisol-Plus# 2025 PM 2.5 Sampler	MRAS Shop D101A	2025B217930506	7/1/2005	12	\$11,890.00	Good	Backup
125634	FLUKE	Fluke 5520A Voltage Calibrator	Standards Lab Room B105	S970008	9/7/2005	12	\$24,633.00	Good	Active
127392	FLUKE	Fluke 8508A/01-8.5 Digit Ref. Multi	Standards Lab Room B105	908852245	3/27/2006	12	\$16,665.00	Good	Active
127441	ALUMA TOWER	Aluminum Crankup Tower 35Ft W/Base	Pensacola NAS	N/A	4/3/2006	12	\$2,235.00	Good	Active
127442	ALUMA TOWER	Aluminum Crankup Tower 35Ft W/Base	Stuart	N/A	4/3/2006	12	\$2,235.00	Good	Active
127530	FLUKE	Fluke Kit	MRAS Shop D101A	9015198	4/20/2006	12	\$1,362.05	Good	Backup
127531	FLUKE	Fluke Kit	Stuart	9005307	4/20/2006	12	\$1,362.05	Good	Active
127612	ESC 8832	Esc Data Logger Model#8832	MRAS Shop D101A	A1289	4/24/2006	12	\$6,200.00	Good	Backup
127613	ESC 8832	Esc Data Logger Model#8832	St. Andrews State Park	A1288	4/24/2006	12	\$6,200.00	Good	Active

127614	ESC 8832	Esc Data Logger Model#8832	Archbold Biological Station	A1287	4/24/2006	12	\$6,200.00	Good	Active
127615	ESC 8832	Esc Data Logger Model#8832 W/Option	MRAS Shop D101A	A1286	4/24/2006	12	\$6,846.28	Good	Backup
132187	THERMO 1400	VSCC Monitor	Ocala YMCA	140AB266790704	5/17/2007	11	\$24,964.00	Good	Active
132281	THERMO 49i	49ia Photometric Ozone	St. Marks Wildlife Refuge	0714922084	5/29/2007	10	\$7,313.50	Good	Active
132282	THERMO 49i-PS	49iPS Photometric Ozone	Sanford	0714922083	5/29/2007	10	\$9,518.93	Good	Active
132884	THERMO 42i	42i Chemil No-No2- Nox Analyzer	MRAS Shop D101A	CM07230014	6/28/2007	10	\$11,305.00	Good	Backup
133513	CHINOOK Streamline Pro	Streamline Pro Multical System	MRAS Shop D101A	M070802	8/28/2007	10	\$3,548.00	Good	Backup
134321	ESC 8832	Esc Model 8832 Ambient Data Logger	Fort Walton Beach	A2187	1/4/2008	10	\$6,020.00	Good	Active
134322	ESC 8832	Esc Model 8832 Ambient Data Logger	Palatka Barge Port	A2188	1/4/2008	10	\$6,020.00	Good	Active
134323	ESC 8832	Esc Model 8832 Ambient Data Logger	Pensacola NAS	A2326K	1/4/2008	10	\$6,020.00	Good	Active
135129	FLUKE	Fluke Kit-715/87-5E Calibrator 715	Winkler Pump Station	9612059	6/9/2005	12	\$1,081.00	Good	Active
135239	ALUMA TOWER	Crankup Tower Aluminum 35Ft	Sanford	AT-82070-T-4-2	4/28/2008	10	\$2,367.50	Good	Active
135538	WELLS CARGO	Site Monitoring Trailer 8X20	Flagler	1WC200J2383058 622	5/14/2008	10	\$14,597.00	Good	Active
135562	WELLS CARGO	Site Monitoring Trailer 8X20	Stuart	1WC200J2583058 623	5/27/2008	9	\$14,597.00	Good	Active
137051	THERMO 49i	Photometric Ozone Analyzer	Fort Walton Beach	0820431148	7/14/2008	9	\$7,353.50	Good	Active
137052	THERMO 49i-PS	Photometric Ozone Calibrator	MRAS Shop D101A	0820430996	7/14/2008	9	\$10,165.00	Good	Backup
137565	THERMO 1405	TEOM Monitor 1405	White Springs	1405A1264112212	9/8/2008	9	\$17,554.10	Good	Active
137871	ENVIRONICS 7000	Zero Air Generator7000 Series	Standards Lab Room B105	4367	11/21/2008	9	\$6,669.00	Good	Active

137872	ENVIRONICS 7000	Zero Air Generator7000 Series	Standards Lab Room B105	4386	11/21/2008	9	\$6,669.00	Good	Active
137873	ENVIRONICS 7000	Zero Air Generator7000 Series	Standards Lab Room B105	4387	11/21/2008	9	\$6,669.00	Good	Active
137874	ENVIRONICS 7000	Zero Air Generator7000 Series	Standards Lab Room B105	4388	11/21/2008	9	\$6,669.00	Good	Active
138290	ESC 8832	Ambient Data Logger	Port Orange	A3101K	3/12/2009	9	\$6,836.67	Good	Active
138291	ESC 8832	Ambient Data Logger	MRAS Shop D101A	A3102K	3/12/2009	9	\$6,836.67	Good	Backup
138292	ESC 8832	Ambient Data Logger	Flagler	A3103K	3/12/2009	9	\$6,836.67	Good	Active
138593	CHINOOK Streamline Pro	Streamline Pro Multical System	MRAS Shop D101A	M081202	4/15/2009	9	\$3,917.00	Good	Backup
138594	CHINOOK Streamline Pro	Streamline Pro O- Multical System	MRAS Shop D101A	M081204	4/15/2009	9	\$3,917.00	Good	Backup
138595	CHINOOK Streamline Pro	Streamline Pro Multical System	MRAS Shop D101A	M080510	4/15/2009	9	\$3,917.00	Good	Backup
139025	THERMO 49i	49i-UV Photometric Ozone Calibrator	St. Andrews State Park	0913235776	5/4/2009	9	\$10,202.76	Good	Active
139174	THERMO 49i	49i-UV Photometric Ozone Analyzer	Woodlawn Beach Middle School	CM09130039	5/12/2009	9	\$7,569.45	Good	Active
139697	THERMO 2025	Partisol Plus 2025 Air Sampler	MRAS Shop D101A	2025B225330905	6/10/2009	8	\$12,464.95	Good	Backup
139698	THERMO 2025	Partisol Plus 2025 Air Sampler	Melbourne	2025B225320905	6/10/2009	8	\$12,464.95	Good	Active
139699	THERMO 1405	TEOM Monitor Model 1405	Bonifay Tri-County Airport	1405A204650904	6/10/2009	8	\$17,857.44	Good	Active
139700	THERMO 1405	TEOM Monitor Model 1405	MRAS Shop D101A	1405A204780905	6/10/2009	8	\$17,857.43	Good	Backup
139701	WELLS CARGO	Trailer 8X20 Dep21075	Bay Oaks Park	1WC200J2693059 622	6/16/2009	8	\$16,922.25	Good	Active
139702	WELLS CARGO	Trailer 8X20Dep21076	Crystal River Preserve	1WC200J2893059 623	6/16/2009	8	\$16,922.25	Good	Active
140120	TELEDYNE 700E	Teledyne Model 700 Calibrator	Fernandina Beach Waste Water Treatment Plant	703-S	10/26/2009	8	\$16,958.96	Good	Active
140296	THERMO 2025	Air Sampler	MRAS Shop D101A	2025B225830910	1/11/2010	8	\$12,575.80	Good	Backup
140297	THERMO 2025	Air Sampler	Millhopper	2025B225910910	1/11/2010	8	\$12,575.80	Good	Active

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140298	THERMO 2025	Air Sampler	Sanford	2025B225920912	1/11/2010	8	\$12,575.80	Good	Active
140299	THERMO 2025	Air Sampler	MRAS Shop D101A	2025B225930910	1/11/2010	8	\$12,575.81	Good	Backup
140300	THERMO 2025	Air Sampler	Millhopper	2025B225940910	1/11/2010	8	\$12,575.81	Good	Active
140301	THERMO 49i	Analyzer	Holiday	CM09500013	1/8/2010	8	\$7,936.32	Good	Active
140302	THERMO 49i	Analyzer	Tallahassee Community College	CM09500014	1/8/2010	8	\$7,936.32	Good	Active
140303	THERMO 49i	Analyzer	St. Andrews State Park	CM09500015	1/8/2010	8	\$7,936.32	Good	Active
140304	THERMO 49i	Analyzer	Bonifay Tri-County Airport	CM09500016	1/8/2010	8	\$7,936.33	Good	Active
140305	THERMO 49i	Analyzer	MRAS Shop D101A	CM09500017	1/8/2010	8	\$7,936.33	Good	Backup
140306	THERMO 49i-PS	Calibrator	Woodlawn Beach Middle School	0935239567	1/8/2010	8	\$9,808.00	Good	Active
140307	THERMO 49i-PS	Calibrator	MRAS Shop D101A	035239568	1/8/2010	8	\$9,808.00	Good	Backup
140308	THERMO 49i-PS	Calibrator	Tallahassee Community College	035239569	1/8/2010	8	\$9,808.00	Good	Active
140309	THERMO 49i-PS	Calibrator	Holiday	035239570	1/8/2010	8	\$9,808.00	Good	Active
140310	THERMO 49i-PS	Calibrator	Paynes Prairie Farm	035239571	1/8/2010	8	\$9,808.00	Good	Active
140617	TELEDYNE 700E	Gas Calibrator	Sikes Elementary School	898-S	6/1/2010	7	\$15,103.00	Good	Active
140619	TELEDYNE 700E	Gas Calibrator	MRAS Shop D101A	897-S	6/1/2010	7	\$15,103.00	Good	Backup
140620	TELEDYNE 700E	Gas Calibrator	White Springs	895-S	6/1/2010	7	\$15,103.00	Good	Active
140621	TELEDYNE 700E	Gas Calibrator	MRAS Shop D101A	899-S	6/1/2010	7	\$15,103.00	Good	Backup
140622	TELEDYNE 700E	Gas Calibrator	Port Manatee	900-S	6/1/2010	7	\$15,103.00	Good	Active
140661	ESC 8832	Ambient Data System Controller	MRAS Shop D101A	A3730K	6/8/2010	7	\$8,570.00	Good	Backup
140662	ESC 8832	Ambient Data System Controller	MRAS Shop D101A	A3731K	6/8/2010	7	\$8,570.00	Good	Backup
140930	VAISALA WXT520	Wxt520 Weather Transmitter	Fernandina Beach Waste Water Treatment Plant	F2620012	7/9/2010	7	\$2,032.75	Good	Active
141343	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Savannas	CYQ74P1	12/6/2010	7	\$621.90	Good	Active
141344	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	H8Y74P1	12/6/2010	7	\$621.90	Good	Backup

141345	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Bonifay Tri-County Airport	HW955P1	12/6/2010	7	\$621.90	Good	Active
141346	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Pensacola NAS	GP955P1	12/6/2010	7	\$621.90	Good	Active
141347	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	1S955P1	12/6/2010	7	\$621.90	Good	Backup
141348	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Clermont	FP955P1	12/6/2010	7	\$621.90	Good	Active
141349	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Sikes Elementary School	2X955P1	12/6/2010	7	\$621.90	Good	Active
141350	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Osceola Co. Fire Station - Four Corners	8YQ74P1	12/6/2010	7	\$621.90	Good	Active
141351	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Rotary Park	J8Y74P1	12/6/2010	7	\$621.90	Good	Active
141352	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Holiday	8X955P1	12/6/2010	7	\$621.90	Good	Active
141353	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Port Manatee	C9Y74P1	12/6/2010	7	\$621.90	Good	Active
141354	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	9YQ74P1	12/6/2010	7	\$621.90	Good	Backup
141355	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	CQ955P1	12/6/2010	7	\$621.90	Good	Backup
141356	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	1Q955P1	12/6/2010	7	\$621.90	Good	Backup
141357	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Paynes Prairie Farm	JP955P1	12/6/2010	7	\$621.90	Good	Active
141358	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Stuart	4YQ74P1	12/6/2010	7	\$621.90	Good	Active
141359	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	St. Andrews State Park	3BYS3P1	12/6/2010	7	\$621.90	Good	Active
141360	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	G6X74P1	12/6/2010	7	\$621.90	Good	Backup
141361	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Palatka Barge Port	8Q955P1	12/6/2010	7	\$621.90	Good	Active
141362	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Archbold Biological Station	8R955P1	12/6/2010	7	\$621.90	Good	Active
141363	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Port Orange	7Q955P1	12/6/2010	7	\$621.90	Good	Active

141364	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	29Y74P1	12/6/2010	7	\$621.90	Good	Backup
141365	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	San Antonio	5BYS3P1	12/6/2010	7	\$621.90	Good	Active
141366	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	FQ955P1	12/6/2010	7	\$621.90	Good	Backup
141367	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Bay Oaks Park	J7Y74P1	12/6/2010	7	\$621.90	Good	Active
141368	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Crystal River Preserve	19Y74P1	12/6/2010	7	\$621.90	Good	Active
141369	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Ellyson Industrial Park	BR955P1	12/6/2010	7	\$621.90	Good	Active
141370	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	H7Y74P1	12/6/2010	7	\$621.90	Good	Backup
141371	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	D5X74P1	12/6/2010	7	\$621.90	Good	Backup
141372	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Ocala YMCA	2ZQ74P1	12/6/2010	7	\$621.90	Good	Active
141373	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Woodlawn Beach Middle School	BQ955P1	12/6/2010	7	\$621.90	Good	Active
141374	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Cocoa Beach	N/A	12/6/2010	7	\$621.90	Good	Active
141375	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	JXQ74P1	12/6/2010	7	\$621.90	Good	Backup
141376	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	D9Y74P1	12/6/2010	7	\$621.90	Good	Backup
141377	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Flagler	6XQ74P1	12/6/2010	7	\$621.90	Good	Active
141378	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Fort Walton Beach	B5X74P1	12/6/2010	7	\$621.90	Good	Active
141379	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	CP955P1	12/6/2010	7	\$621.90	Good	Backup
141380	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	7XQ74P1	12/6/2010	7	\$621.90	Good	Backup
141381	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	1ZQ74P1	12/6/2010	7	\$621.90	Good	Backup
141382	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	GR955P1	12/6/2010	7	\$621.90	Good	Backup

141383	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	F9Y74P1	12/6/2010	7	\$621.90	Good	Backup
141384	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	Marion County Sherriff	H9Y74P1	12/6/2010	7	\$621.90	Good	Active
141385	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	88Y74P1	12/6/2010	7	\$621.90	Good	Backup
141386	DELL OPTIPLEX 780	Computer Dell OptiPlex 780	MRAS Shop D101A	16X74P1	12/6/2010	7	\$621.90	Good	Backup
142164	<b>TELEDYNE T400</b>	UV Analyzer	MRAS Shop D101A	0087	2/8/2011	7	\$7,819.25	Good	Inactive
142165	<b>TELEDYNE 701</b>	Air System Model 701	MRAS Shop D101A	3412	2/7/2011	7	\$4,057.13	Good	Backup
142166	TELEDYNE 701	Air System Model 701	Crystal River Preserve	3413	2/7/2011	7	\$4,057.13	Good	Active
142167	TELEDYNE 701	Air System Model 701	MRAS Shop D101A	3414	2/7/2011	7	\$4,057.13	Good	Backup
142168	TELEDYNE 701	Air System Model 701	Port Manatee	3415	2/7/2011	7	\$4,057.13	Good	Active
142169	TELEDYNE 701	Air System Model 701	MRAS Shop D101A	3416	2/7/2011	7	\$4,057.13	Good	Backup
142170	<b>TELEDYNE 701</b>	Air System Model 701	MRAS Shop D101A	3418	2/7/2011	7	\$4,057.13	Good	Backup
142171	<b>TELEDYNE 701</b>	Air System Model 701	Palatka Barge Port	3419	2/7/2011	7	\$4,057.13	Good	Active
142172	TELEDYNE 701	Air System Model 701	Sikes Elementary School	3420	2/7/2011	7	\$4,057.13	Good	Active
142173	TELEDYNE 701	Air System Model 701	MRAS Shop D101A	3421	2/7/2011	7	\$4,057.13	Good	Backup
142174	TELEDYNE 701	Air System Model 701	MRAS Shop D101A	3422	2/7/2011	7	\$4,057.13	Good	Backup
142176	<b>TELEDYNE 701</b>	Air System Model 701	MRAS Shop D101A	3424	2/7/2011	7	\$4,057.13	Good	Backup
142178	VAISALA WXT520	Weather Transmitter	Ellyson Industrial Park	G0350001	2/7/2011	7	\$2,648.00	Good	Active
142179	VAISALA WXT520	Weather Transmitter	Osceola National Forest - Olustee Ranger Station	G0350002	2/7/2011	7	\$2,648.00	Good	Active
142180	VAISALA WXT520	Weather Transmitter	Bonifay Tri-County Airport	G0350003	2/7/2011	7	\$2,648.00	Good	Active
142181	VAISALA WXT520	Weather Transmitter	Ocala YMCA	G035004	2/7/2011	7	\$2,648.00	Good	Active
142182	VAISALA WXT520	Weather Transmitter	Woodlawn Beach Middle School	G0350005	2/7/2011	7	\$2,648.00	Good	Active
142183	VAISALA WXT520	Weather Transmitter	Flagler	G0350006	2/7/2011	7	\$2,648.00	Good	Active
142184	VAISALA WXT520	Weather Transmitter	Pensacola NAS	G0350007	2/7/2011	7	\$2,648.00	Good	Active
142185	VAISALA WXT520	Weather Transmitter	White Springs	G0350008	2/7/2011	7	\$2,648.00	Good	Active
142186	VAISALA WXT520	Weather Transmitter	MRAS Shop D101A	G0350009	2/7/2011	7	\$2,648.00	Good	Backup

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142187	VAISALA WXT520	Weather Transmitter	Palatka Barge Port	G0350010	2/7/2011	7	\$2,648.00	Good	Active
142188	VAISALA WXT520	Weather Transmitter	MRAS Shop D101A	G0350011	2/7/2011	7	\$2,648.00	Good	Backup
142189	VAISALA WXT520	Weather Transmitter	Savannas	G0350012	2/7/2011	7	\$2,648.00	Good	Active
142190	VAISALA WXT520	Weather Transmitter	MRAS Shop D101A	G0350013	2/7/2011	7	\$2,648.00	Good	Backup
142191	VAISALA WXT520	Weather Transmitter	St. Andrews State Park	G0350014	2/7/2011	7	\$2,648.00	Good	Active
142192	VAISALA WXT520	Weather Transmitter	MRAS Shop D101A	G0350015	2/7/2011	7	\$2,649.00	Good	Backup
142203	TELEDYNE T400	MDL T400 UV Analyzer	MRAS Shop D101A	057	2/23/2011	7	\$9,757.51	Good	Inactive
142205	TELEDYNE T400	MDL T400 UV Analyzer	MRAS Shop D101A	059	2/23/2011	7	\$9,757.51	Good	Inactive
142256	THERMO 2025	Air Sampler	Daytona Blind Services	2025B227811103	3/11/2011	7	\$12,575.81	Good	Active
143498	VAISALA WXT520	Vaisala Weather Transmitter	Osceola Co. Fire Station - Four Corners	G3420030	9/23/2011	6	\$2,618.24	Good	Active
143499	VAISALA WXT520	Vaisala Weather Transmitter	Tallahassee Community College	G3420033	9/23/2011	6	\$2,618.24	Good	Active
143500	VAISALA WXT520	Vaisala Weather Transmitter	St. Marks Wildlife Refuge	G3420031	9/23/2011	6	\$2,618.24	Good	Active
143501	VAISALA WXT520	Vaisala Weather Transmitter	Holiday	G3420027	9/23/2011	6	\$2,618.24	Good	Active
143502	VAISALA WXT520	Vaisala Weather Transmitter	Fort Walton Beach	G3420022	9/23/2011	6	\$2,618.24	Good	Active
143503	VAISALA WXT520	Vaisala Weather Transmitter	MRAS Shop D101A	G3420021	9/23/2011	6	\$2,618.24	Good	Backup
143504	VAISALA WXT520	Vaisala Weather Transmitter	Baptist Children's Home	G3420026	9/23/2011	6	\$2,618.24	Good	Active
143505	VAISALA WXT520	Vaisala Weather Transmitter	Sanford	G3420029	9/23/2011	6	\$2,618.24	Good	Active
143506	VAISALA WXT520	Vaisala Weather Transmitter	Stuart	G3420035	9/23/2011	6	\$2,618.24	Good	Active
143508	VAISALA WXT520	Vaisala Weather Transmitter	Port Orange	G3420032	9/23/2011	6	\$2,618.24	Good	Active
143509	VAISALA WXT520	Vaisala Weather Transmitter	Cocoa Beach	G3420024	9/23/2011	6	\$2,618.24	Good	Active

143510	VAISALA WXT520	Vaisala Weather Transmitter	MRAS Shop D101A	G3420014	9/23/2011	6	\$2,618.24	Good	Backup
143511	VAISALA WXT520	Vaisala Weather Transmitter	Laurel Oak Elementary	G3420015	9/23/2011	6	\$2,618.24	Good	Active
143512	VAISALA WXT520	Vaisala Weather Transmitter	Archbold Biological Station	G3420025	9/23/2011	6	\$2,618.24	Good	Active
143513	VAISALA WXT520	Vaisala Weather Transmitter	Rotary Park	G3420034	9/23/2011	6	\$2,618.24	Good	Active
143514	VAISALA WXT520	Vaisala Weather Transmitter	Crystal River Preserve	G3420012	9/23/2011	6	\$2,618.24	Good	Active
143515	VAISALA WXT520	Vaisala Weather Transmitter	Bay Oaks Park	G3420011	9/23/2011	6	\$2,618.24	Good	Active
143516	VAISALA WXT520	Vaisala Weather Transmitter	Melbourne	G3420013	9/23/2011	6	\$2,618.24	Good	Active
143517	VAISALA WXT520	Vaisala Weather Transmitter	Paynes Prairie Farm	G3420017	9/23/2011	6	\$2,618.24	Good	Active
143518	VAISALA WXT520	Vaisala Weather Transmitter	Marion County Sherriff	G3420016	9/23/2011	6	\$2,618.24	Good	Active
143519	VAISALA WXT520	Vaisala Weather Transmitter	Lake City Veteran's Domicile	G3420018	9/23/2011	6	\$2,618.24	Good	Active
143520	VAISALA WXT520	Vaisala Weather Transmitter	MRAS Shop D101A	G3420020	9/23/2011	6	\$2,618.24	Good	Backup
143521	VAISALA WXT520	Vaisala Weather Transmitter	Clermont	G3420019	9/23/2011	6	\$2,618.24	Good	Active
143522	VAISALA WXT520	Vaisala Weather Transmitter	San Antonio	G3420023	9/23/2011	6	\$2,618.24	Good	Active
145216	THERMO 49i	Ozone Analyzer	Paynes Prairie Farm	1227254949	10/19/2012	5	\$8,441.78	Good	Active
145217	THERMO 49i	Ozone Analyzer	Osceola Co. Fire Station - Four Corners	N/A	10/19/2012	5	\$8,441.78	Good	Active
145218	THERMO 49i	Ozone Analyzer	Clermont	1227254945	10/19/2012	5	\$8,441.78	Good	Active
145219	THERMO 49i	Ozone Analyzer	Ellyson Industrial Park	1227254948	10/19/2012	5	\$8,441.78	Good	Active
145220	THERMO 49i	Ozone Analyzer	Ocala YMCA	1227254942	10/19/2012	5	\$8,441.78	Good	Active
145221	THERMO 49i	Ozone Analyzer	MRAS Shop D101A	1227254944	10/19/2012	5	\$8,441.78	Good	Backup
145222	THERMO 49i	Ozone Analyzer	Pensacola NAS	1227254950	10/19/2012	5	\$8,441.78	Good	Active
145223	THERMO 49i	Ozone Analyzer	Port Orange	1227254946	10/19/2012	5	\$8,441.78	Good	Active
145224	THERMO 49i	Ozone Analyzer	MRAS Shop D101A	N/A	10/19/2012	5	\$8,441.78	Good	Backup
145225	THERMO 49i-PS	Ozone Calibrator	Pensacola NAS	1227254881	10/19/2012	5	\$11,487.49	Good	Active
145226	THERMO 49i-PS	Ozone Calibrator	Laurel Oak Elementary	1227254880	10/19/2012	5	\$11,487.49	Good	Active

145227	THERMO 49i-PS	Ozone Calibrator	Port Orange	1227254882	10/19/2012	5	\$11,487.49	Good	Active
145228	THERMO 49i-PS	Ozone Calibrator	Ellyson Industrial Park	1227254878	10/19/2012	5	\$11,487.49	Good	Active
145229	THERMO 49i-PS	Ozone Calibrator	MRAS Shop D101A	1227254879	10/19/2012	5	\$11,487.49	Good	Backup
145230	THERMO 43i	Pulse Fluor SO2 Analyzer	Palatka Barge Port	1227254884	10/19/2012	5	\$11,213.28	Good	Active
145231	THERMO 43i	Pulse Fluor SO2 Analyzer	Fernandina Beach Waste Water Treatment Plant	1227254883	10/19/2012	5	\$11,213.28	Good	Active
145265	THERMO 1405	Air Monitor	Fort Walton Beach	1405A212581101	3/30/2011	7	\$18,374.48	Good	Active
145266	THERMO 1405	Air Monitor	Yulee	1405A213561102	3/30/2011	7	\$18,374.48	Good	Active
145510	THERMO 43i	Pulse Flour Model 43i S02 Analyzer	Ellyson Industrial Park	1308857348	4/11/2013	5	\$11,497.28	Good	Active
145511	THERMO 43i	Pulse Flour Model 43i S02 Analyzer	Crystal River Preserve	1308857349	4/11/2013	5	\$11,497.28	Good	Active
145512	THERMO 43i	Pulse Flour Model 43i S02 Analyzer	Port Manatee	1308857350	4/11/2013	5	\$11,497.28	Good	Active
145513	THERMO 43i	Pulse Flour Model 43i S02 Analyzer	MRAS Shop D101A	1308857351	4/11/2013	5	\$11,497.28	Good	Backup
146565	THERMO 49i	UV 03 Analyzer	Daytona Blind Services	1317958398	7/12/2013	4	\$8,657.24	Good	Active
146566	THERMO 49i	UV 03 Analyzer	Sikes Elementary School	N/A	7/12/2013	4	\$8,657.24	Good	Active
146567	THERMO 49i	UV 03 Analyzer	Melbourne	1317958400	7/12/2013	4	\$8,657.24	Good	Active
146568	THERMO 49i-PS	UV 03 Calibrator	Cocoa Beach	1317958401	7/12/2013	4	\$11,771.49	Good	Active
146569	THERMO 49i-PS	UV 03 Calibrator	Melbourne	1317958402	7/12/2013	4	\$11,771.49	Good	Active
146570	THERMO 49i-PS	UV 03 Calibrator	MRAS Shop D101A	N/A	7/12/2013	4	\$11,771.49	Good	Backup
146571	THERMO 49i-PS	UV 03 Calibrator	MRAS Shop D101A	N/A	7/12/2013	4	\$11,771.49	Good	Backup
146572	THERMO 1405	1405 Monitor	Tallahassee Community College	N/A	7/12/2013	4	\$16,883.57	Good	Active
146573	THERMO 43i	Pulse S02 Analyzer	MRAS Shop D101A	JC1306300719	7/12/2013	4	\$11,486.40	Good	Backup
146574	THERMO 43i	Pulse S02 Analyzer	Sikes Elementary School	N/A	7/12/2013	4	\$11,486.40	Good	Active
147046	THERMO 49i	UV 03 Analyzer 491A1Naa	Marion County Sherriff	1331659576	12/11/2013	4	\$7,917.81	Good	Active
147047	THERMO 49i	UV 03 Analyzer 491A1Naa	Lake City Veteran's Domicile	1331659580	12/11/2013	4	\$7,917.81	Good	Active

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147048	THERMO 49i	UV 03 Analyzer 491A1Naa	Flagler	1331659608	12/11/2013	4	\$7,917.81	Good	Active
147049	THERMO 49i	UV 03 Analyzer 491A1Naa	Laurel Oak Elementary	1331659573	12/11/2013	4	\$7,917.81	Good	Active
147050	THERMO 49i	UV 03 Analyzer 491A1Naa	MRAS Shop D101A	1331659539	12/11/2013	4	\$7,917.81	Good	Backup
147051	THERMO 49i	UV 03 Analyzer 491A1Naa	Osceola National Forest - Olustee Ranger Station	1331659578	12/11/2013	4	\$7,917.81	Good	Active
147052	THERMO 49i	UV 03 Analyzer 491A1Naa	San Antonio	1331659538	12/11/2013	4	\$7,917.81	Good	Active
147053	THERMO 49i	UV 03 Analyzer 491A1Naa	Archbold Biological Station	1331659581	12/11/2013	4	\$7,917.81	Good	Active
147054	THERMO 49i	UV 03 Analyzer 491A1Naa	Bay Oaks Park	1331659575	12/11/2013	4	\$7,917.81	Good	Active
147055	THERMO 49i	UV 03 Analyzer 491A1Naa	Savannas	1331659609	12/11/2013	4	\$7,917.81	Good	Active
147056	THERMO 49i	UV 03 Analyzer 491A1Naa	MRAS Shop D101A	1331659579	12/11/2013	4	\$7,917.81	Good	Backup
147057	THERMO 49i	UV 03 Analyzer 491A1Naa	MRAS Shop D101A	1331659577	12/11/2013	4	\$7,917.81	Good	Backup
147058	THERMO 49i	UV 03 Analyzer 491A1Naa	Baptist Children's Home	1331659574	12/11/2013	4	\$7,917.81	Good	Active
147059	THERMO 49i	UV 03 Analyzer 491A1Naa	Rotary Park	1331659610	12/11/2013	4	\$7,917.81	Good	Active
147060	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Ocala YMCA	1331659541	12/11/2013	4	\$10,766.07	Good	Active
147061	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Osceola Co. Fire Station - Four Corners	1331659643	12/11/2013	4	\$10,766.07	Good	Active
147062	THERMO 49i-PS	UV 03 Primary Standard Calibrator	MRAS Shop D101A	1331659645	12/11/2013	4	\$10,766.07	Good	Backup
147063	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Sanford	1331659614	12/11/2013	4	\$10,766.07	Good	Active
147064	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Marion County Sherriff	1331659584	12/11/2013	4	\$10,766.07	Good	Active
147065	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Bay Oaks Park	1331659608	12/11/2013	4	\$10,766.07	Good	Active

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147066	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Osceola National Forest - Olustee Ranger Station	1331659540	12/11/2013	4	\$10,766.07	Good	Active
147067	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Clermont	1331659582	12/11/2013	4	\$10,766.07	Good	Active
147068	THERMO 49i-PS	UV 03 Primary Standard Calibrator	MRAS Shop D101A	1331659611	12/11/2013	4	\$10,766.07	Good	Backup
147069	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Flagler	1331659628	12/11/2013	4	\$10,766.07	Good	Active
147070	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Bonifay Tri-County Airport	1331659629	12/11/2013	4	\$10,766.07	Good	Active
147071	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Daytona Blind Services	1331659630	12/11/2013	4	\$10,766.07	Good	Active
147072	THERMO 49i-PS	UV 03 Primary Standard Calibrator	San Antonio	1331659583	12/11/2013	4	\$10,766.07	Good	Active
147073	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Archbold Biological Station	1331659627	12/11/2013	4	\$10,766.07	Good	Active
147074	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Savannas	1331659642	12/11/2013	4	\$10,766.07	Good	Active
147075	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Lake City Veteran's Domicile	1331659612	12/11/2013	4	\$10,766.07	Good	Active
147076	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Baptist Children's Home	1331659644	12/11/2013	4	\$10,766.07	Good	Active
147077	THERMO 49i-PS	UV 03 Primary Standard Calibrator	MRAS Shop D101A	1331659613	12/11/2013	4	\$10,766.07	Good	Backup
147078	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Fort Walton Beach	1331659543	12/11/2013	4	\$10,766.07	Good	Active
147079	THERMO 49i-PS	UV 03 Primary Standard Calibrator	Stuart	1331659542	12/11/2013	4	\$10,766.07	Good	Active
147080	TELEDYNE T700	T700 Dynamic Dilution Calibrator	MRAS Shop D101A	1038	12/28/2013	4	\$15,313.43	Good	Backup
147081	TELEDYNE T700	T700 Dynamic Dilution Calibrator	Ellyson Industrial Park	1039	12/28/2013	4	\$15,313.43	Good	Active
147082	TELEDYNE T700	T700 Dynamic Dilution Calibrator	MRAS Shop D101A	1040	12/28/2013	4	\$15,313.43	Good	Backup
147571	ESC 8832	8832 Ambient Data System Controller	Stuart	A4790K	2/25/2014	4	\$7,600.00	Good	Active

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147572	ESC 8832	8832 Ambient Data System Controller	MRAS Shop D101A	A4773K	2/25/2014	4	\$7,600.00	Good	Backup
147891	NOVA-LYNX	M202 Handheld Digital Barometer	MRAS Shop D101A	1238000148	4/18/2014	4	\$1,452.85	Good	Backup
148145	THERMO 1405	Continuous PM Monitor	St. Marks Wildlife Refuge	1405A228401405	6/18/2014	3	\$17,138.19	Good	Active
148239	THERMO 49i	Analyzer	St. Marks Wildlife Refuge	1417862270	6/30/2014	3	\$8,960.83	Good	Active
148240	THERMO 49i	Analyzer	Cocoa Beach	1417862271	6/30/2014	3	\$8,960.83	Good	Active
148241	THERMO 49i	Analyzer	Stuart	1417862272	6/30/2014	3	\$8,960.83	Good	Active
148242	THERMO 49i-PS	Calibrator	Sikes Elementary School	1417862273	6/30/2014	3	\$12,231.77	Good	Active
148243	THERMO 49i-PS	Calibrator	Rotary Park	1417862274	6/30/2014	3	\$12,231.77	Good	Active
148411	WILLIAM SCOTSMAN	Portable Bldg.	Pensacola NAS	B043MODB25	8/6/2014	3	\$34,799.00	Good	Active
148419	NOVA-LYNX	Barometer	MRAS Shop D101A	N/A	8/14/2014	3	\$1,448.25	Good	Backup
148420	NOVA-LYNX	Barometer	MRAS Shop D101A	N/A	8/14/2014	3	\$1,448.25	Good	Backup
148421	NOVA-LYNX	Barometer	MRAS Shop D101A	1429000090	8/14/2014	3	\$1,448.25	Good	Backup
149023	ESC 8872	Data Logger	Tallahassee Community College	0381	2/6/2015	3	\$6,280.00	Good	Active
149365	THERMO 2025i	Partisol Air Sampler	Winkler Pump Station	20251W20273141 2	5/4/2015	3	\$12,970.08	Good	Active
149366	THERMO 2025i	Air Samplers	Ellyson Industrial Park	2025IW207201412	5/4/2015	3	\$12,970.08	Good	Active
149367	THERMO 2025i	Partisol Air Sampler	Ellyson Industrial Park	2025IW207241412	5/4/2015	3	\$12,970.08	Good	Active
149368	THERMO 2025i	Partisol Air Sampler	Tallahassee Community College	2025IW207211412	5/4/2015	3	\$12,970.08	Good	Active
149369	THERMO 2025i	Partisol Air Sampler	Tallahassee Community College	2025IW207311501	5/4/2015	3	\$12,970.08	Good	Active
149468	TELEDYNE T700U	Calibrator	MRAS Shop D101A	242	6/12/2015	2	\$21,610.90	Good	Backup
149485	ESC 8872	Data Loggers	Ellyson Industrial Park	0458	6/16/2015	2	\$6,647.50	Good	Active
149486	ESC 8872	Data Loggers	St. Marks Wildlife Refuge	0459	6/16/2015	2	\$6,647.50	Good	Active
149487	ESC 8872	Data Logger	MRAS Shop D101A	0460	6/16/2015	2	\$6,647.50	Good	Backup

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149488	ESC 8872	Data Loggers	Osceola National Forest - Olustee Ranger Station	461	6/16/2015	2	\$6,647.50	Good	Active
149489	ESC 8872	Data Loggers	Melbourne	462	6/16/2015	2	\$6,647.50	Good	Active
149558	TELEDYNE T750U	Calibrator T750U 56	MRAS Shop D101A	56	7/10/2015	2	\$21,387.90	Good	Backup
149559	TELEDYNE T750U	Calibrator	MRAS Shop D101A	57	7/10/2015	2	\$21,387.90	Good	Backup
149560	TELEDYNE T750U	Calibrator T750U 58	MRAS Shop D101A	58	7/10/2015	2	\$21,387.90	Good	Backup
149630	ESC 8872	Base Model 8872 Data Acquisition	Fernandina Beach Waste Water Treatment Plant	0488	9/11/2015	2	\$6,840.00	Good	Active
149631	ESC 8872	Base Model 8872 Data Acquisition	Yulee	0489	9/11/2015	2	\$6,840.00	Good	Active
149632	ESC 8872	Base Model 8872 Data Acquisition	Lake City Veteran's Domicile	0487	9/11/2015	2	\$6,840.00	Good	Active
149633	ESC 8872	Base Model 8872 Data Acquisition	Sanford	0490	9/11/2015	2	\$6,840.00	Good	Active
149826	THERMO 43i	431 SO2 Analyzer	White Springs	JC1526101647	11/12/2015	2	\$11,983.43	Good	Active
149827	THERMO 43i	431 SO2 Analyzer	MRAS Shop D101A	JC1526101643	11/12/2015	2	\$11,983.43	Good	Backup
149904	TELEDYNE 602	Model 602 Beta plus Particle	MRAS Shop D101A	182	11/18/2015	2	\$48,913.44	Good	Inactive
149905	TELEDYNE 602	Model 602 Beta plus Particle	MRAS Shop D101A	183	11/18/2015	2	\$48,913.43	Good	Inactive
149906	TELEDYNE 602	Model 602 Beta plus Particle	MRAS Shop D101A	184	11/18/2015	2	\$48,913.43	Good	Inactive
149977	THERMO 1405	TEOM 1405 Monitor	St. Andrews State Park	1405A232741511	12/1/2015	2	\$16,881.22	Good	Active
149978	THERMO 1405	TEOM 1405 Monitor	Lake City Veteran's Domicile	1405A232711510	12/1/2015	2	\$16,881.22	Good	Active
149979	THERMO 1405	TEOM 1405 Monitor	MRAS Shop D101A	1405A232961511	12/1/2015	2	\$16,881.22	Good	Backup
149980	THERMO 1405	TEOM 1405 Monitor	Woodlawn Beach Middle School	1405A232801511	12/1/2015	2	\$16,881.22	Good	Active
149981	THERMO 1405	TEOM 1405 Monitor	Crystal River Preserve	1405A232951511	12/1/2015	2	\$16,881.22	Good	Active

150105	TELEDYNE T700	T700 Dynamic Dilution Calibrator	Palatka Barge Port	2330	1/26/2016	2	\$14,914.00	Good	Active
150106	TELEDYNE T700	T700 Dynamic Dilution Calibrator	Crystal River Preserve	2329	1/26/2016	2	\$14,914.00	Good	Active
150107	TELEDYNE T700	T700 Dynamic Dilution Calibrator	MRAS Shop D101A	2328	1/26/2016	2	\$14,914.00	Good	Backup
151131	BGI Tetra Cal	Tetra Cal Calibrators	MRAS Shop D101A	151505	10/12/2016	1	\$2,300.00	Good	Backup
151132	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151494	10/18/2016	1	\$2,300.00	Good	Backup
151133	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151503	10/18/2016	1	\$2,300.00	Good	Backup
151134	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151509	10/18/2016	1	\$2,300.00	Good	Backup
151135	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151498	10/18/2016	1	\$2,300.00	Good	Backup
151136	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151500	10/18/2016	1	\$2,300.00	Good	Backup
151137	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151504	10/18/2016	1	\$2,300.00	Good	Backup
151138	BGI Tetra Cal	Tetra Cal Calibrator	MRAS Shop D101A	151493	10/18/2016	1	\$2,300.00	Good	Backup
152008	TELEDYNE T750U	Portab. Dynamic Dilution Calibrator	Standards Lab Room B105	99	4/20/2017	1	\$22,116.50	Good	Active
152012	THERMO 1405	1405 Membrane Monitor	Baptist Children's Home	1405A239061703	4/25/2017	1	\$20,264.42	Good	Active
152054	THERMO 2025i	Partisol Plus Sampler 2025I-Av	Melbourne	2025IW11921704	5/9/2017	1	\$18,201.88	Good	Active
152395	TELEDYNE T640	Mass Monitor T640 PM	Sanford	182	6/13/2017	11 mos.	\$23,307.40	Good	Active
152396	TELEDYNE T640	Mass Monitor T640 PM	Winkler Pump Station	183	6/13/2017	11 mos.	\$23,307.40	Good	Active
152397	TELEDYNE T640	Mass Monitor T640 PM	Daytona Blind Services	184	6/13/2017	11 mos.	\$23,307.40	Good	Active
152398	TELEDYNE T640	Mass Monitor T640 PM	Tallahassee Community College	185	6/13/2017	11 mos.	\$23,307.40	Good	Active
152399	TELEDYNE T640	Mass Monitor T640 PM	MRAS Shop D101A	186	6/13/2017	11 mos.	\$23,799.20	Good	Backup
152472	TELEDYNE T300	T300U CO Analyzer 2 Pk	St. Marks Wildlife Refuge	SN378	7/11/2017	10 mos.	\$13,181.50	Good	Active
152514	THERMO 1405	1405 AVF TEOM	MRAS Shop D101A	1405A239561706	7/14/2017	10 mos.	\$20,264.42	Good	Backup
152515	THERMO 1405	1405 AVF TEOM	Daytona Blind Services	1405A239571706	7/14/2017	10 mos.	\$20,264.42	Good	Active
152516	THERMO 1405	1405 AVF TEOM	Sanford	1405A239551706	7/14/2017	10 mos.	\$20,264.42	Good	Active

152604	ESC 8872	Agilaire Data Acquisition System	Winkler Pump Station	717	7/25/2017	10 mos.	\$6,840.00	Good	Active
152605	ESC 8872	Agilaire Data Acquisition System	MRAS Shop D101A	718	7/25/2017	10 mos.	\$6,840.00	Good	Backup
152606	ESC 8872	Agilaire Data Acquisition System	MRAS Shop D101A	719	7/25/2017	10 mos.	\$6,840.00	Good	Backup
152607	ESC 8872	Agilaire Data Acquisition System	Baptist Children's Home	720	7/25/2017	10 mos.	\$6,840.00	Good	Active
152608	ESC 8872	Agilaire Data Acquisition System	Daytona Blind Services	721	7/25/2017	10 mos.	\$6,840.00	Good	Active
152635	TELEDYNE T100U	T100U Analyzer	St. Marks Wildlife Refuge	278	7/27/2017	10 mos.	\$12,686.50	Good	Active
152636	TELEDYNE T200U	T200U Analyzer	St. Marks Wildlife Refuge	334	7/27/2017	10 mos.	\$22,831.50	Good	Active
153217	THERMO 1405	1405 AVF TEOM	Laurel Oak Elementary	1405A240341711	11/14/2017	6 mos.	\$20,264.42	Good	Active
153218	THERMO 1405	1405 AVF TEOM	Winkler Pump Station	1405A240351711	11/14/2017	6 mos.	\$20,264.42	Good	Active
153345	TELEDYNE T640	Mass Monitor T640 PM	MRAS Shop D101A	281	11/28/2017	5 mos.	\$23,307.40	Good	Backup
153346	TELEDYNE T640	Mass Monitor T640 PM	MRAS Shop D101A	282	11/28/2017	5 mos.	\$23,307.40	Good	Backup
153347	TELEDYNE T640	Mass Monitor T640 PM	MRAS Shop D101A	283	11/28/2017	5 mos.	\$23,307.40	Good	Backup
153348	TELEDYNE T640	Mass Monitor T640 PM	Baptist Children's Home	284	11/28/2017	5 mos.	\$23,307.40	Good	Active
BL605005	WELLS CARGO	Air Monitoring Shelter 4833	Osceola Co. Fire Station - Four Corners	1WC200J19Y3043 548	10/4/2000	17	\$9,094.40	Good	Active
BL605007	WELLS CARGO	Air Monitoring Shelter 4828	Laurel Oak Elementary	1WC200J17Y3043 550	10/4/2000	17	\$9,094.40	Good	Active
BL605008	WELLS CARGO	Air Monitoring Shelter 4829	Lake City Veteran's Domicile	1WC200J10Y3043 552	10/4/2000	17	\$9,094.40	Good	Active
BL605009	WELLS CARGO	Air Monitoring Shelter 4830	Clermont	1WC200J13Y3043 445	10/4/2000	17	\$9,094.40	Good	Active
BL605010	WELLS CARGO	Air Monitoring Shelter 4831	Fort Walton Beach	1WC200J19Y3043 551	10/4/2000	17	\$9,094.40	Good	Active
BL605011	WELLS CARGO	Air Monitoring Shelter 4832	St. Andrews State Park	1WC200J14Y3043 554	10/4/2000	17	\$9,094.40	Good	Active

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BL605012	WELLS CARGO	Air Monitoring Shelter 4834	San Antonio	1WC200J10Y3043 549	10/4/2000	17	\$9,094.40	Good	Active
BL605014	WELLS CARGO	Air Monitoring Shelter 4845	Archbold Biological Station	N/A	10/4/2000	17	\$9,094.40	Good	Active
BL605016	WELLS CARGO	Air Monitoring Shelter	Marion County Sherriff	N/A	10/4/2000	17	\$9,094.40	Good	Active
BL605019	WELLS CARGO	Air Monitoring Shelter 4955	Palatka Barge Port	1P9BW1227BM65 2286	10/4/2000	17	\$9,094.40	Good	Active
ER026441	ALUMA TOWER	Met Tower	Daytona Blind Services	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER030277	WELLS CARGO	91 Wells Cargo 8'X20' Trailer	Port Orange	1WC200J19M302 2127	10/2/1991	26	\$9,020.00	Good	Active
ER030279	WELLS CARGO	'91 Wells Cargo 8'X20' Trailer Tag#24125	Winkler Pump Station	1WC200J12M302 2129	10/2/1991	26	\$9,020.00	Good	Active
ER030280	WELLS CARGO	'91 Wells Cargo 8'X20' Trailer Tag#24127	Holiday	1WC200J19M302 2130	10/2/1991	26	\$9,020.00	Good	Active
ER030281	WELLS CARGO	'91 Wells Cargo 8'X20' Trailer Tag#24126	Baptist Children's Home	1WC200J1CM302 2131	10/2/1991	26	\$9,020.00	Good	Active
ER031033	ALUMA TOWER	Met Tower	Osceola Co. Fire Station - Four Corners	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER031034	ALUMA TOWER	Met Tower	Port Orange	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER031035	ALUMA TOWER	Met Tower	Laurel Oak Elementary	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER031036	ALUMA TOWER	10M Aluminum Crank-Up Tower W/Tbase	Baptist Children's Home	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER031037	ALUMA TOWER	10M Aluminum Crank-Up Tower W/Tbase	Holiday	N/A	11/21/1991	26	\$1,148.00	Good	Active
ER031217	WELLS CARGO	'92 Wells Cargo Trailer Tag#24129	Sikes Elementary School	1WC200J12N3022 729	1/31/1992	26	\$8,991.03	Good	Active
ER031305	WELLS CARGO	'92 Wells Cargo Trailer Tag#23938	Ocala YMCA	1WC200J1XN302 2977	3/26/1992	26	\$8,791.02	Good	Active
EPA Supplied	ALUMA TOWER	Aluma Tower T-13512	St. Marks Wildlife Refuge	214005.Z.2-3	7/3/2014	3	\$0.00	Good	Active
EPA Supplied	TELEDYNE T700U	Teledyne API T700U	St. Marks Wildlife Refuge	203	7/3/2014	3	\$0.00	Good	Active
EPA Supplied	CAS 9003	Cas 9003 Series Shelter Standalone Ambient Air Monitoring Enclosure.	St. Marks Wildlife Refuge	4072	7/3/2014	3	\$0.00	Good	Active

EPA Supplied	ESC 8872	Agilaire Data Acquisition System	White Springs	236	7/3/2014	3	\$0.00	Good	Active
EPA Supplied	THERMO 2025	R&P 2025 Sampler (EPA Purchased, No Dep #)	Baptist Children's Home	2025A203949806	6/1/1998	19	\$0.00	Good	Active

		Η	Hillsborough Cou	nty					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
0113125	Thermo 43C	SO2 Analyzer	AMD Lab	43C-71072-367	9/30/2001	16	\$8,460.00	Good	Active
0105689	Agilaire 8832	Datalogger	AMD Lab	A4036K	10/15/1997	20	\$2,250.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	AMD Lab	813-283-8735	7/2/2010	7	\$499.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	AMD Lab	813-347-2397	7/2/2010	7	\$499.00	Good	Active
N/A	ADS N/A	Zero Air System	Apollo Bch	N/A	1/1/1999	19	N/A	Good	Active
162036	Thermo 146i	Dynamic Gas Calibrator	Apollo Bch	1150560040	3/11/2015	2	\$11,000.0 0	Good	Active
N/A	R&P 1400ab	<b>TEOM PM Monitor</b>	Apollo Bch	140AB23579	1/1/2006	12	N/A	Fair	Active
0105560	Agilaire 8832	Datalogger	Apollo Bch	A4032K	10/15/1997	20	\$2,250.00	Good	Active
163503	Thermo 43i	Sulfur Dioxide Analyzer	Apollo Bch	1151660006	10/31/2015	2	\$11,905.4 0	Good	Active
N/A	Tisch TE-1000	High Volume Sampler	CSX Railyard	VFC P7639	8/12/2010	7	N/A	Good	Active
N/A	Tisch TE-1000	High Volume Sampler	CSX Railyard	VFC P7669	8/12/2010	7	N/A	Good	Active
0105557	ESC 8816	Datalogger	CSX Railyard	1482	10/15/1997	20	\$2,250.00	Fair	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	CSX Railyard	813-293-8556	7/2/2010	7	N/A	Good	Active
0139851	RM Young 81000	Ultrasonic Anemometer	CSX Railyard	01820	9/7/2006	11	\$2,239.00	Good	Active
159672	Thermo 49i	Ozone Analyzer	Davis Island	1417062039	6/19/2014	3	N/A	Good	Active
159674	Thermo 43i	Sulfur Dioxide Analyzer	Davis Island	JC1411401168	5/20/2014	3	\$11,905.4 0	Good	Active
155344	Teledyne-API 701	Zero Air System	Davis Island	4536	3/29/2013	4	\$3,645.00	Good	Active
0105558	Agilaire 8832	Datalogger	Davis Island	A3193K	10/15/1997	20	\$2,250.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Davis Island	813-727-7244	12/1/2008	9	N/A	Good	Active
N/A	RM Young 81000	Ultrasonic Anemometer	Davis Island	2464	N/A	N/A	N/A	Good	Active
N/A	Thermo 1405	<b>TEOM PM Monitor</b>	Davis Island	1405A233691512	1/6/2016	2	N/A	Good	Active
N/A	Thermo 146i	Dynamic Gas Calibrator	Davis Island	1171160009	5/4/2017	0	N/A	Good	Active
N/A	Thermo 49i	Ozone Analyzer	Davis Island	1417062039	N/A	N/A	N/A	Good	Active
0105566	Agilaire 8832	Datalogger	East Bay	A4031K	10/15/1997	20	\$2,250.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	East Bay	813-455-4791	7/2/2010	7	\$499.00	Good	Active
34888	API	Shelter Temp Sensor	East Bay	N/A	Pre 1986	N/A	N/A	Good	Active
162635	Thermo 43i	Sulfur Dioxide Analyzer	East Bay	1151630005	6/30/2015	2	\$11,905.4 0	Good	Active

162086	Teledyne-API 701H	Zero Air System	East Bay	115	5/11/2015	2	\$7,110.00	Good	Active
162037	Thermo 146i	Dynamic Gas Calibrator	East Bay	1150560039	3/12/2015	2	\$13,000.0 0	Good	Active
0129398	Thermo 49C PS	Ozone Calibrator	EPC Office	0325801888	9/30/2003	14	\$8,109.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	EPC Office	813-293-9176	7/2/2010	7	\$499.00	Good	Active
0139230	Thermo 49i	Ozone Analyzer	Gandy	0619417392	6/29/2001	11	\$7,077.00	Good	Active
0118205	R&P 1400ab	TEOM PM Monitor	Gandy	140AB236660105	9/6/2001	16	\$17,460.0 0	Fair	Active
0142736	Thermo 49i PS	Ozone Calibrator	Gandy	0717722871	7/20/2007	10	\$9,583.68	Good	Active
0105564	Agilaire 8832	Datalogger	Gandy	A3123K	10/15/1997	20	\$2,250.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Gandy	813-347-3023	12/1/2008	9	N/A	Good	Active
34884	API N/A	Shelter Temp Sensor	Gandy	N/A	6/8/1905	N/A	N/A	Good	Active
142736	Thermo 49i PS	Ozone Calibrator	Gandy	717722871	N/A	N/A	N/A	Good	Active
N/A	Thermo 49i	Ozone Analyzer	Gandy	619417392	N/A	N/A	N/A	Good	Active
161072	Thermo 1405	TEOM PM Monitor	Gardinier Park	1405A229161408	10/20/2014	3	\$17,290.0 0	Good	Active
0118149	Agilaire 8832	Datalogger	Gardinier Park	A4030K	9/6/2001	16	\$6,080.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Gardinier Park	813-283-8630	7/2/2010	7	\$499.00	Good	Active
34875	API N/A	Shelter Temp Sensor	Gardinier Park	N/A	1/1/1986	32	N/A	Good	Active
N/A	Tisch TE-1000	High Volume Sampler	Johnson Control	VFC P7808	1/1/2010	8	N/A	Good	Active
N/A	Tisch TE-1000	High Volume Sampler	Kenly	VFC P7539	6/3/2010	7	N/A	Good	Active
157304	Teledyne-API 633	Aethalometer	Munro Street	AE33-S01-00093	5/22/2013	4	\$20,292.8 0	Good	Active
157307	Teledyne-API T300U	СО	Munro Street	124	5/22/2013	4	\$12,578.1 0	Good	Active
157308	Teledyne-API T200UP	NOX	Munro Street	75	5/22/2013	4	\$24,934.8 0	Good	Active
158964	Thermo 5014i	Continuous PM2.5 Beta	Munro Street	13381008	2/24/2014	3	N/A	Good	Active
157306	Teledyne-API T700U	Multi-gas Dilution Calibrator	Munro Street	612	5/22/2013	4	\$16,178.8 0	Good	Active
157305	Teledyne-API 701H	Zero Air System	Munro Street	678	5/22/2013	4	\$6,815.10	Good	Active
157299	Agilaire 8832	Datalogger	Munro Street	A4646K	5/31/2013	4	\$9,690.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Munro Street	813-347-3024	12/1/2008	9	N/A	Good	Active
0118207	RM Young 81000	Ultrasonic Anemometer	Munro Street	00425	9/6/2001	16	\$2,959.00	Good	Active
0133904	RM Young 81000	Ultrasonic Anemometer	Munro Street	01394	12/17/2004	13	\$2,125.00	Good	Active
N/A	Tisch TE-1000	High Volume Sampler	Patent	VFC P7807	6/3/2010	7	N/A	Good	Active

0131960	Agilaire 8832	Datalogger	Simmons Park	A3124K	11/13/2003	14	\$5,000.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Simmons Park	813-455-4790	7/2/2010	7	\$499.00	Good	Active
N/A	RM Young 81000	Ultrasonic Anemometer	Simmons Park	2463	N/A	N/A	N/A	Good	Active
162634	Thermo 49i PS	Ozone Calibrator	Simmons Park	1151660005	7/1/2015	2	\$12,587.0 0	Good	Active
162633	Thermo 49i	Ozone Analyzer	Simmons Park	1151660004	7/1/2015	2	\$9,139.00	Good	Active
N/A	Teledyne-API 701	Zero Air System	Simmons Park	481	1/1/2016	2	\$4,385.00	Good	Active
N/A	ERG Carbonyl Sampler	Carbonyl Sampling System	Sydney	C-6	N/A	N/A	N/A	Good	Active
158214	Thermo 5014i	Continuous PM2.5 Beta	Sydney	CM13181009	7/11/2013	4	\$17,860.5 0	Good	Active
0142735	Thermo 49i	Ozone Analyzer	Sydney	0717722870	7/20/2007	10	\$7,092.77	Good	Active
N/A	General Metals PUF	PUF Air Sampler	Sydney	11038	N/A	N/A	N/A	Good	Active
N/A	Graseby PUF	PUF Air Sampler	Sydney	N/A	N/A	N/A	N/A	Good	Active
N/A	Met One SASS	Speciation Aerosol Sampling System	Sydney	A4037	1/13/2005	13	N/A	Good	Active
159671	Thermo 42i-Y	NO-DIF-NOY ANALYZER	Sydney	1417162075	6/24/2014	3	N/A	Good	Active
0139231	Thermo 49i PS	Ozone Calibrator	Sydney	0619417393	6/29/2006	11	\$9,567.50	Good	Active
157300	Agilaire 8832	Datalogger	Sydney	A4645K	5/31/2013	4	\$9,690.00	Good	Active
N/A	Sierra Wireless Airlink Raven X V4221-V	Wireless Modem	Sydney	813-347-3025	12/1/2008	9	N/A	Good	Active
0133908	RM Young 81000	Ultrasonic Anemometer	Sydney	01389	17-Dec-04	13	\$2,125.00	Good	Active
156947	RM Young 81000	Ultrasonic Anemometer	Sydney	3727	1/11/2013	5	\$2,590.00	Good	Active
161613	URG 3000N	Carbon Sampling System	Sydney	N/A	3/3/2015	2	\$13,026.7 7	Good	Active
162087	Teledyne-API 701H	Zero Air System	Sydney	114	5/11/2015	2	\$7,110.00	Good	Active
162637	RM Young 81000	Ultrasonic Anemometer	Sydney	4349	8/7/2015	2	\$2,750.00	Good	Active
N/A	Thermo 49i PS	Ozone Calibrator	Sydney	1171160007	5/9/2017	0	N/A	Good	Active
N/A	Thermo 49i	Ozone Analyzer	Sydney	1171160008	5/11/2017	0	N/A	Good	Active
N/A	Thermo 2025i	Partisol Sampler PM10/PM2.5	Sydney	2025IW2 1164 1703	3/23/2017	0	N/A	Good	Active
N/A	Thermo 2025i	Partisol Sampler PM10/PM2.5	Sydney	2025IW2 1163 1703	3/23/2017	0	N/A	Good	Active
N/A	Thermo 2025i	Partisol Sampler PM10/PM2.5	Sydney	2025IW2 1151 1702	3/23/2017	0	N/A	Good	Active
155474	Teledyne-API T700U	Dynamic Gas Calibrator	Sydney	295	5/9/2012	5	\$12,775.6 1	Good	Active
0113125	Thermo 43C	SO2 Analyzer	AMD Lab	43C-64052-342	9/30/1999	18	\$8,460.00	Good	Backup
102851	Thermo 49C	Ozone Analyzer	AMD Lab	N/A	10/17/1996	21	\$3,250.00	Good	Backup
N/A	Thermo 49i	Ozone Analyzer	AMD Lab	CM08320014	N/A	N/A	N/A	Good	Backup

N/A	URG 3000N	Carbon Sampling System	AMD Lab	3N-B0356	1/1/2009	9	N/A	Good	Backup
0135869	Thermo 43CTLE	SO2 Analyzer Trace	AMD Lab	0509111179	6/30/2005	12	\$11,980.0 0	Good	Backup
0115247	R&P 1400ab	TEOM PM Monitor	AMD Lab	140AB231200006	8/31/2000	17	\$17,590.0 0	Fair	Backup
0105554	ESC 8816	Datalogger	AMD Lab	1491	10/15/1997	20	\$2,250.00	Fair	Backup
N/A	Thermo 2025i	PARTISOL SAMPLER	AMD Lab	2025i20611201	3/12/2012	5	N/A	Fair	Backup
0130567	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	0401304578	1/29/2004	14	\$8,805.00	Good	Backup
0130566	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	0401304577	1/29/2004	14	\$8,805.00	Good	Backup
0118924	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	146C-71430-368	10/26/2001	16	\$7,925.00	Good	Backup
0123699	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	146C-74126-375	5/28/2002	15	\$7,924.50	Good	Backup
0107295	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	146C-60569-327	7/20/1998	19	\$7,128.66	Good	Backup
0105561	ESC 8816	Datalogger	AMD Lab	1487	10/15/1997	20	\$2,250.00	Fair	Backup
0105565	ESC 8816	Datalogger	AMD Lab	1481	10/15/1997	20	\$2,250.00	Fair	Backup
0105567	ESC 8816	Datalogger	AMD Lab	1489	10/15/1997	20	\$2,250.00	Fair	Backup
0119781	ESC 8816	Datalogger	AMD Lab	4237	11/30/2001	16	\$6,080.00	Fair	Backup
0125015	ESC 8816	Datalogger	AMD Lab	4418	4/26/2002	15	\$6,080.00	Fair	Backup
0131961	ESC 8816	Datalogger	AMD Lab	5001	11/13/2003	14	\$5,000.00	Fair	Backup
0131962	ESC 8816	Datalogger	AMD Lab	5025	11/13/2003	14	\$6,255.00	Fair	Backup
N/A	ESC 8816	Datalogger	AMD Lab	3986	N/A	N/A	N/A	Fair	Backup
N/A	ESC 8816	Datalogger	AMD Lab	3985	N/A	N/A	N/A	Fair	Backup
34877	API N/A	Shelter Temp Sensor	AMD Lab	N/A	N/A	N/A	N/A	Good	Backup
34881	API N/A	Shelter Temp Sensor	AMD Lab	N/A	N/A	N/A	N/A	Good	Backup
N/A	Met One 50.5	Ultrasonic Anemometer	AMD Lab	A3130	N/A	N/A	N/A	Good	Backup
N/A	Met One 50.5	Ultrasonic Anemometer	AMD Lab	A3264	N/A	N/A	N/A	Good	Backup
162688	Agilaire 8872	Datalogger	AMD Lab	478	9/3/2015	2	\$9,000.00	Good	Backup
130566	Thermo 146C	Dynamic Gas Calibrator	AMD Lab	N/A	N/A	N/A	N/A	Good	Backup
N/A	Thermo 49iPS	Ozone Calibrator	AMD Lab	N/A	N/A	N/A	N/A	Good	Backup
N/A	Thermo 49i	Ozone Analyzer	AMD Lab	717722870	N/A	N/A	N/A	Good	Backup
0107287	Thermo 146C	Dynamic Gas Calibrator	AQML	146C-60763-328	7/20/1998	19	\$10,230.0 0	Good	Backup
N/A	Tisch TE-5170-DV TSPVFC	High Volume Sampler	EPC Boat House	P7404	N/A	N/A	N/A	Good	Backup
N/A	Tisch TE-5170-DV TSPVFC	High Volume Sampler	EPC Boat House	P7405	N/A	N/A	N/A	Good	Backup
N/A	Tisch TE-5170-DV TSPVFC	High Volume Sampler	EPC Boat House	P7406	N/A	N/A	N/A	Good	Backup
N/A	Tisch TE-5170-DV TSPVFC	High Volume Sampler	EPC Boat House	P7407	N/A	N/A	N/A	Good	Backup

N/A	Tisch TE-5170-DV TSPVFC	High Volume Sampler	EPC Boat House	P7408	N/A	N/A	N/A	Good	Backup
146302	Tisch PUF	PUF Air Sampler	EPC Boat House	2958	7/17/2008	9	\$2,645.00	Good	Backup
0118921	Thermo 49C	Ozone Analyzer	EPC Office	49C-71572-369	9/30/2001	16	\$6,354.00	Good	Backup
0118147	Agilaire 8832	Datalogger	EPC Office	A3125K	9/6/2001	16	\$6,080.00	Good	Backup
34879	API	Shelter Temp Sensor	Progress	N/A	N/A	N/A	N/A	Good	Backup
N/A	ARA Inc.	Multi-gas Dilution Calibrator	TMDL Trailer	MGC003	N/A	N/A	N/A	Fair	Backup
N/A	ARA Inc.	Multi-gas Dilution Calibrator	TMDL Trailer	MGC001	N/A	N/A	N/A	Fair	Backup
N/A	ARA Inc. Various	Zero Air System	TMDL Trailer	ZAS001	N/A	N/A	N/A	Fair	Backup
N/A	ParoScientific Met 4 A	T/RH/BP	TMDL Trailer	106006	N/A	N/A	N/A	Good	Backup
N/A	ARA Inc. Various	Dry Air System	TMDL Trailer	DA001	N/A	N/A	N/A	Good	Backup

Manatee County											
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status		
N/A	Thermo 49i PS	Calibrator	Port Manatee	1311657726	2011	7	\$10,417.00	Good	Active		
N/A	Thermo 49i PS	Calibrator	39th Street	1116648522	2011	7	\$10,417.00	Good	Active		
N/A	Thermo 49i PS	Calibrator	G.T. Bray	1023843898	2013	5	\$10,417.00	Good	Active		
N/A	2B Technologies 202	O3 monitor	G.T. Bray	903	2010	8	\$5,000.00	Good	Active		
N/A	2B Technologies 202	O3 monitor	Port Manatee	1221	2012	6	\$5,000.00	Good	Active		
N/A	2B Technologies 202	O3 monitor	39th Street	1092	2011	7	\$5,000.00	Good	Active		
N/A	2B Technologies 202	O3 monitor	Office	1094	2011	7	\$5,000.00	Good	Backup		
N/A	2B Technologies 205	O3 monitor	Office	1462DB	2017	Unknown	\$5,000.00	Good	Inactive		
N/A	2B Technologies 306	O3 Generator	Office	180	2017	Unknown	\$3,000.00	Good	Inactive		
N/A	ESC Datalogger 8872	Data logger	39th Street	8872_385	2014	4	\$7,640.00	Good	Active		
N/A	ESC Datalogger 8832	Data logger	Port Manatee	A4002K	2012	6	\$7,640.00	Good	Active		
N/A	ESC Datalogger 8832	Data logger	G.T. Bray	A1583K	2006	12	\$7,640.00	Good	Active		
N/A	ESC Datalogger 8832	Data logger	Office	A3763k	2011	7	\$7,640.00	Good	Backup		
N/A	RM Young 85000	Anemometer	Port Manatee	N/A	2011	7	\$1,390.00	Good	Active		
N/A	RM Young 85000	Anemometer	G.T. Bray	N/A	2011	7	\$1,390.00	Good	Active		
N/A	RM Young 85000	Anemometer	39th Street	N/A	2013	5	\$1,390.00	Good	Active		
N/A	Fluke 51 II	Thermometer	Office	14390153	2010	8	\$270.00	Good	Active		
N/A	Bios 220 Definer	flow sensor	Office	135621	2014	4	\$2,125.00	Good	Active		
N/A	Fluke 715	voltage generator	Office	2799124	2014	4	\$1,200.00	Good	Active		
N/A	Fluke 175	volt meter	Office	15880829	2011	7	\$300.00	Good	Active		
N/A	Fluke 1623-2	Ground tester	Office	St144506177B2	2012	6	\$2,700.00	Good	Active		
N/A	Air Monitoring Trailer	Shelter	G.T. Bray	N/A	2016	2	\$18,335.00	Good	Active		
N/A	Air Monitoring Trailer	Shelter	Port Manatee	N/A	2012	6	\$18,335.00	Good	Active		
N/A	Air Monitoring Trailer	Shelter	39th Street	N/A	1998	20	\$18,335.00	Fair	Active		
N/A	Gast 1HAB-11T- M100x	Zero Air	G.T. Bray	N/A	Unknown	Unknown	\$1,082.05	Fair	Active		

N/A	Gast 1HAB-11T- M100x	Zero Air	Port Manatee	N/A	Unknown	Unknown	\$1,082.05	Fair	Active
N/A	Gast 1HAB-11T- M100x	Zero Air	39th Street	N/A	Unknown	Unknown	\$1,082.05	Fair	Active
N/A	Gast 1HAB-11T- M100x	Zero Air	Office	N/A	Unknown	Unknown	\$1,082.05	Fair	Backup
N/A	LabComp ATX	Shelter temp	G.T. Bray	182	Unknown	Unknown	\$255.00	Fair	Active
N/A	LabComp ATX	Shelter temp	Port Manatee	183	Unknown	Unknown	\$255.00	Fair	Active
N/A	LabComp ATX	Shelter temp	39th Street	189	Unknown	Unknown	\$255.00	Fair	Active
N/A	Extech AN400	Anemometer	Office	N/A	Unknown	Unknown	\$189.00	Fair	Active
N/A	Glen Martin MF1331	Met Tower	Port Manatee	N/A	2016	1	\$5,260.00	Good	Active
N/A	Glen Martin MF1331	Met Tower	G.T. Bray	N/A	1998	20	\$5,260.00	Fair	Active
N/A	Glen Martin MF1331	Met Tower	39th Street	N/A	1998	20	\$5,260.00	Fair	Active
N/A	Omega HX93bv1-D	Temp Sensor	Office	N/A	2015	3	\$255.00	Good	Backup
N/A	Omega HX93bv1-D	Temp Sensor	Office	N/A	2013	5	\$255.00	Good	Backup
N/A	Airlink GX400	Communications	G.T. Bray	N/A	2012	6	\$750.00	Good	Active
N/A	Airlink GX400	Communications	Port Manatee	N/A	2012	6	\$750.00	Good	Active
N/A	Airlink GX400	Communications	39th Street	N/A	2012	6	\$750.00	Good	Active
N/A	Various	Dehumidifier	39th Street	N/A	Unknown	Unknown	\$230.00	Fair	Active
N/A	Various	Dehumidifier	Port Manatee	N/A	Unknown	Unknown	\$230.00	Fair	Active
N/A	Various	Dehumidifier	G.T. Bray	N/A	Unknown	Unknown	\$230.00	Fair	Active

	Miami Dade County											
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status			
650571	Environics 6100	CALIBRATOR	Lab Annex	2988	9/9/2002	16	\$9,800.00	Good	Active			
847518	Environics 6100	CALIBRATOR	Pennsuco	6149	6/12/2014	4	\$9,800.00	Good	Active			
850706	Environics 6100	CALIBRATOR	Rosenstiel	6255	3/23/2015	3	\$9,800.00	Good	Active			
857330	Agilaire 8872	DATALOGGER	Pennsuco	0691	2017	1	\$9,125.00	Good	Active			
852468	Agilaire 8872	DATALOGGER	Perimeter Road	0480	2017	1	\$9,125.00	Good	Active			
854375	Agilaire 8872	DATALOGGER	Perdue	0582	2017	1	\$9,125.00	Good	Active			
857329	Agilaire 8872	DATALOGGER	Rosenstiel	0693	2017	1	\$9,125.00	Good	Active			
857331	Agilaire 8872	DATALOGGER	Lab Annex	0692	2017	1	\$9,125.00	Good	Active			
655487	TEOM 1400A	TEOM	Miami Fire Station	140AB246900307	7/18/2003	15	\$20,544.00	Good	Active			
655488	TEOM 1400A	TEOM	Homestead Fire Station	140AB246910307	7/18/2003	15	\$20,544.00	Good	Active			
828399	Thermo 43i	SO2 MONITOR	Pennsuco	1305956985	2012	6	\$12,120.00	Good	Active			
847867	Thermo 49i	O3 ANALYZER	Perdue	1429063113	10/2/2014	4	\$8,260.00	Good	Active			
847984	Thermo 49i	O3 ANALYZER	Perdue	1429063114	10/9/2014	4	\$8,260.00	Good	Active			
821943	Thermo 49i-PS	O3 CAL PRIMARY STANDARD	Perdue	1106747387	2012	6	\$11,500.00	Good	Active			
828400	Thermo 49i-PS	OZONE PRIMARY	Perdue	1303256525	2012	6	\$11,500.00	Good	Active			
819570	Teledyne M701	ZERO AIR SYS	Lab Annex	3299	2012	6	N/A	Good	Active			
819574	Teledyne M701	ZERO AIR SYS	Pennsuco	3295	2012	6	N/A	Good	Active			
819575	Teledyne M701	ZERO AIR SYS	Rosenstiel	3298	2012	6	N/A	Good	Active			
856743	Teledyne T200	NO2 MONITOR	Lab Annex	3574	2017	1	\$11,500.00	Good	Active			
847698	Teledyne T200	NO2 MONITOR	Rosenstiel	1550	9/3/2014	4	\$11,500.00	Good	Active			
841289	Teledyne T200UP	NO2 TL Monitor	Perimeter Road	117	2018	0	\$24,700.00	Good	Active			
ID REQUESTED	Teledyne T640X	PM2.5/PM10 Cont. Monitor	Miami Fire Station	213	2017	1	\$35,395.00	Good	Active			
854236	Teledyne T700U	CALIBRATOR	Perimeter Road	257	7/31/2015	3	\$21,970.00	Good	Active			
853352	Teledyne T701H	ZERO AIR SYS	Perimeter Road	145	7/31/2015	3	\$7,850.00	Good	Active			
854373	Agilaire 8872	DATALOGGER	701 NW 1st CT	0580	2017	1	\$9,125.00	New	Inactive			
854374	Agilaire 8872	DATALOGGER	701 NW 1st CT	0581	2017	1	\$9,125.00	New	Inactive			
852699	Agilaire 8872	DATALOGGER	701 NW 1st CT	0507	9/30/2015	3	\$9,125.00	New	Inactive			
852700	Agilaire 8872	DATALOGGER	701 NW 1st CT	0508	9/30/2015	3	\$9,125.00	New	Inactive			
852701	Agilaire 8872	DATALOGGER	701 NW 1st CT	0509	9/30/2015	3	\$9,125.00	New	Inactive			

847982	Agilaire 8872	DATALOGGER	701 NW 1st CT	0318	10/9/2014	4	\$9,125.00	New	Inactive
847983	Agilaire 8872	DATALOGGER	701 NW 1st CT	0319	10/9/2014	4	\$9,125.00	New	Inactive
ID REQUESTED	R&P 2025i	PARTISOL R&P 2025i	701 NW 1st CT	2025iW210901606	7/8/2016	2	\$18,200.00	New	Inactive
854398	R&P 2025i	PARTISOL R&P 2025i	701 NW 1st CT	2025iW210421605	9/17/2015	3	\$18,200.00	New	Inactive
ID REQUESTED	R&P 2025i	PARTISOL R&P 2025i	701 NW 1st CT	2025iW209101509	9/17/2015	3	\$18,200.00	New	Inactive
ID REQUESTED	R&P 2025i	PARTISOL R&P 2025i	701 NW 1st CT	2025i	9/17/2015	3	\$18,200.00	New	Inactive
848716	R&P 2025i	PARTISOL R&P 2025i	701 NW 1st CT	2025i206811408	9/4/2014	4	\$18,200.00	New	Inactive
850213	Thermo 43i	SO2 MONITOR	701 NW 1st CT	JC1423701318	11/13/2014	4	\$12,120.00	New	Inactive
850212	Thermo 49i PS	O3 PRIMARY	701 NW 1st CT	1430063227	11/13/2014	4	\$11,500.00	New	Inactive
853237	Thermo 49iPS	O3 PRIMARY	701 NW 1st CT	1152610015	9/17/2015	3	\$11,500.00	New	Inactive
853238	Thermo 49iPS	O3 PRIMARY	701 NW 1st CT	1152610016	9/17/2015	3	\$11,500.00	New	Inactive
819571	Teledyne M701	ZERO AIR SYS	701 NW 1st CT	3300	2012	6	N/A	New	Inactive
819572	Teledyne M701	ZERO AIR SYS	701 NW 1st CT	3297	2012	6	N/A	New	Inactive
819573	Teledyne M701	ZERO AIR SYS	701 NW 1st CT	3284	2012	6	N/A	New	Inactive
ID REQUESTED	Teledyne T200	NO2 Monitor	701 NW 1st CT	3785	2017	1	\$11,500.00	New	Inactive
841290	Teledyne T640X	PM2.5/PM10 Cont. Monitor	701 NW 1st CT	287	2017	1	\$35,395.00	New	Inactive
609076	737	ZERO AIR SYS	701 NW 1st CT	2645	1/21/1999	29	N/A	Good	Backup
533459	737	ZERO AIR SYS	701 NW 1st CT	48C-60245-327	1/21/1999	30	N/A	Good	Backup
609076	737	ZERO AIR SYS	701 NW 1st CT	2645	1/21/1999	31	N/A	Good	Backup
650640	737	ZERO AIR SYS	701 NW 1st CT	2780	1/21/1999	32	N/A	Good	Backup
650641	737	ZERO AIR SYS	701 NW 1st CT	2779	1/21/1999	33	N/A	Good	Backup
527508	1200	PM10 HEAD	701 NW 1st CT	2117	7/27/1993	25	N/A	Good	Backup
496260	1200	PM10 HEAD	701 NW 1st CT	2747	5/10/1988	30	N/A	Good	Backup
496261	1200	PM10 HEAD	701 NW 1st CT	2748	5/10/1988	30	N/A	Good	Backup
661185	R&P 2025	PM2.5 SAMPLER FRM	701 NW 1st CT	2025B217240408	9/14/2004	14	N/A	Good	Backup
847517	Environics 6100	CALIBRATOR	701 NW 1st CT	6150	6/12/2014	4	\$9,800.00	Good	Backup
847519	Environics 6100	CALIBRATOR	701 NW 1st CT	6148	6/12/2014	4	\$9,800.00	Good	Backup
658868	Environics 6100	CALIBRATOR	701 NW 1st CT	3177	9/23/2003	15	\$9,800.00	Good	Backup
658869	Environics 6100	CALIBRATOR	701 NW 1st CT	2987	9/9/2002	16	\$9,800.00	Good	Backup
655486	ESC 8816	DATALOGGER	701 NW 1st CT	4956	7/14/2003	15	N/A	Good	Backup
655485	ESC 8816	DATALOGGER	701 NW 1st CT	4948	7/14/2003	15	N/A	Good	Backup

640071	ESC 8816	DATALOGGER	701 NW 1st CT	1585	3/1/2002	16	N/A	Good	Backup
640075	ESC 8816	DATALOGGER	701 NW 1st CT	898	3/1/2002	16	N/A N/A	Good	Backup
640070	ESC 8816	DATALOGGER	701 NW 1st CT	4442	3/1/2002	16	N/A N/A	Good	Backup
640068	ESC 8816	DATALOGGER	701 NW 1st CT	4440	3/1/2002	16	N/A N/A	Good	Backup
640069	ESC 8816	DATALOGGER	701 NW 1st CT	4441	3/1/2002	16	N/A N/A	Good	Backup
640072	ESC 8816	DATALOGGER	701 NW 1st CT	4444	3/1/2002	16	N/A N/A	Good	Backup
640072	ESC 8816	DATALOGGER	701 NW 1st CT	4445	3/1/2002	16	N/A N/A	Good	Backup
640067	ESC 8816	DATALOGGER	701 NW 1st CT	4439	3/1/2002	16	N/A N/A	Good	Backup
828028	Agilaire 8832	DATALOGGER	701 NW 1st CT	A4448K	2010	8	\$6,600.00	Good	Backup
828028	Agilaire 8832	DATALOGGER	701 NW 1st CT	A4446K	2010	8	\$6,600.00	Good	Backup
828030	Agilaire 8832	DATALOGGER	701 NW 1st CT	A4449K	2010	8	\$6,600.00	Good	Backup
808753	Teledyne 300E	CO MONITOR	701 NW 1st CT	2233	9/29/2008	10	\$6,600.00	Good	Backup
808754	Teledyne 300E	CO MONITOR	701 NW 1st CT	2233	9/29/2008	10	\$6,600.00	Good	Backup
658304	Thermo 42C	NO2 MONITOR	701 NW 1st CT	0331002822	9/25/2003	10	\$0,000.00 N/A	Good	Backup
819196	Thermo 42c	NO2 MONITOR	701 NW 1st CT	1007741317	2010	8	N/A N/A	Good	*
819190	Thermo 42i	NO2 MONITOR	701 NW 1st CT 701 NW 1st CT	CM10360071	2010	8 9	N/A N/A	Good	Backup
818999	Thermo 42i	NO2 MONITOR	701 NW 1st CT 701 NW 1st CT	CM10360071 CM08190013	9/29/2008	9 10	N/A N/A	Good	Backup
	4					-			Backup
661214	Thermo 43C	SO2 MONITOR	701 NW 1st CT	0431709340	9/30/2004	14	N/A	Good	Backup
658302	Thermo 43C	SO2 MONITOR	701 NW 1st CT	0333503279	9/25/2003	15	N/A	Good	Backup
661212	Thermo 48C	CO MONITOR	701 NW 1st CT	0431709338	9/30/2004	14	N/A	Good	Backup
661213	Thermo 48C	CO MONITOR	701 NW 1st CT	0431709339	9/30/2004	14	N/A	Good	Backup
659392	Thermo 49C	O3 MONITOR	701 NW 1st CT	03265000001331	9/25/2003	15	N/A	Good	Backup
650568	Thermo 49C	O3 MONITOR	701 NW 1st CT	49C-76048-381	10/1/2002	16	N/A	Good	Backup
650569	Thermo 49C	O3 MONITOR	701 NW 1st CT	0331002821	10/1/2002	16	N/A	Good	Backup
604808	Thermo 49C PS	O3 PRIMARY	701 NW 1st CT	2025B216240304	2/11/1998	30	N/A	Good	Backup
604809	Thermo 49C PS	O3 PRIMARY	701 NW 1st CT	49CPS-60713-328	2/11/1998	30	N/A	Good	Backup
604810	Thermo 49C PS	O3 PRIMARY	701 NW 1st CT	49CPS-60715-328	2/11/1998	30	N/A	Good	Backup
808751	Teledyne 300E	CO MONITOR	701 NW 1st CT	9C4442	9/4/2009	9	N/A	Good	Backup
808752	Teledyne 300E	CO MONITOR	701 NW 1st CT	9C4443	9/4/2009	9	N/A	Good	Backup
853351	Teledyne T200UP	NO2 TL Monitor	701 NW 1st CT	96	7/31/2015	3	\$24,700.00	Good	Backup
655489	TEOM 1400A	TEOM	701 NW 1st CT	140AB246890307	9/4/2009	9	\$20,544.00	Poor	Inactive
847699	Teledyne T200	NO2 MONITOR	701 NW 1st CT	1551	9/3/2014	4	\$11,500.00	Poor	Inactive
659434	R&P 2025	PM2.5 SAMPLER FRM	701 NW 1st CT	2025B216110301	7/18/2003	15	N/A	Poor	Inactive
659435	R&P 2025	PM2.5 SAMPLER FRM	701 NW 1st CT	2025B216260304	7/18/2003	15	N/A	Poor	Inactive

661184	R&P 2025	PM2.5 SAMPLER FRM	701 NW 1st CT	2025B217190408	7/18/2003	15	N/A	Poor	Inactive
659433	R&P 2025	PM2.5 SAMPLER FRM	701 NW 1st CT	2025B216240304	7/18/2003	15	N/A	Poor	Inactive
650570	Environics 6100	CALIBRATOR	701 NW 1st CT	48C-62460-335/5	9/9/2002	16	\$9,800.00	Poor	Inactive
655484	ESC 8816	DATALOGGER	701 NW 1st CT	48C-60244-327	7/14/2003	15	N/A	Poor	Inactive
640074	ESC 8816	DATALOGGER	701 NW 1st CT	4437	3/1/2002	16	N/A	Poor	Inactive
650647	ESC 8816	DATALOGGER	701 NW 1st CT	0331002823	9/13/2002	16	N/A	Poor	Inactive
650648	ESC 8816	DATALOGGER	701 NW 1st CT	48C-62461-335/5	9/13/2002	16	N/A	Poor	Inactive
651906	Thermo 49C	O3 MONITOR	701 NW 1st CT	02155698-3	10/1/2002	16	N/A	Poor	Inactive
604807	Thermo 49C PS	O3 PRIMARY	701 NW 1st CT	49PC60619327	2/11/1998	30	N/A	Poor	Inactive
822887	Teledyne T400	OZONE MONITOR	701 NW 1st CT	101	2015	3	\$4,250.00	Poor	Inactive

	Orange County												
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status				
N/A	HM40	Vaisala	Winter Park	K4730049	N/A	N/A	N/A	Good	Unknown				
N/A	HM40	Vaisala	Winter Park	L1720058	N/A	N/A	N/A	Good	Active				
730582	Definer 220-L	Bio Calibration Flow Meter	Winter Park	111132	N/A	10	N/A	Good	Unknown				
755247	Definer 220-L	Bio Calibration Flow Meter	Winter Park	141461	N/A	3	N/A	Good	Active				
756338	Defender 530-H	Bio Calibration Flow Meter	Winter Park	137288	N/A	3	N/A	Good	Active				
755246	Defender 530-H	Bio Calibration Flow Meter	Winter Park	139494	N/A	3	N/A	Good	Unknown				
755697	Streamline Pro M	Chinook FTS (M)	Winter Park	C150101	N/A	3	N/A	Good	Unknown				
755698	Streamline Pro S	Chinook FTS (S)	Winter Park	C150102	N/A	3	N/A	Good	Active				
N/A	Dwyer	Manometer	Winter Park	N5OZ	N/A	N/A	N/A	Good	Unknown				
N/A	Dwyer	Manometer	Winter Park	N03AA0213007	N/A	N/A	N/A	Good	Active				
756329	Novalynx	Barometer	Winter Park	1616000018	N/A	2	N/A	Good	Active				
756330	Novalynx	Barometer	Winegard Elementary School	1616000019	N/A	2	N/A	Good	Active				
756331	Novalynx	Barometer	Winter Park	1616000020	N/A	2	N/A	Good	Unknown				
756328	Novalynx	Barometer	McCrory Place - Air Lab	1616000021	N/A	2	N/A	Good	Unknown				
N/A	Control Comp.	Digital Thermometer	Winter Park	L616301	N/A	N/A	N/A	Good	Active				
N/A	Fisher	Thermometer	Winter Park	T-113	N/A	N/A	N/A	Good	Active				
N/A	Fisher	Thermometer	Winter Park	13307418	N/A	N/A	N/A	Good	Active				
N/A	Fluke	Volt Meter	Winter Park	65560195	N/A	N/A	N/A	Good	Active				
N/A	Fluke	Volt Meter	Winter Park	31360435	N/A	3	N/A	Good	Active				
N/A	Control Comp.	Clock	Winter Park	TC-01	N/A	N/A	N/A	Good	Active				
N/A	Control Comp.	Clock	Winegard Elementary School	TC-02	N/A	N/A	N/A	Good	Active				
N/A	Control Comp.	Clock	I-4 Near Road	TC-03	N/A	N/A	N/A	Good	Unknown				
N/A	Control Comp.	Clock	McCrory Place - Todd's Office	TC-05	N/A	N/A	N/A	Good	Unknown				
756640	BGI	VSCC	Winter Park	180514-25	N/A	2	N/A	Good	Active				
756638	BGI	VSCC	Winter Park	070614-166	N/A	2	N/A	Good	Active				
756639	BGI	VSCC	Winter Park	270711-31	N/A	2	N/A	Good	Active				

N/A	BGI	VSCC	Winter Park	138712	N/A	N/A	N/A	Good	Active
N/A	BGI	VSCC	Winter Park	221112-180	N/A	N/A	N/A	Good	Unknown
N/A	BGI	VSCC	Winter Park	147526	N/A	N/A	N/A	Good	Unknown
749643	TEI 49iPS	Ozone PS	Winter Park	1336460151	2/05/2014	4	N/A	Good	Unknown
970874	TEI 49iPS	Ozone PS	Winter Park	1007441118	3/29/2010	8	N/A	Fair	Active
756626	TEI 49iPS	Ozone PS	Winegard Elementary School	1151380003	7/07/2015	3	N/A	Good	Active
764208	TEI 49iPS	Ozone PS	Winter Park	1170050012	2/3/2017	1	N/A	Good	Unknown
764207	TEI 49i	Ozone	Winter Park	1170050011	2/1/2017	1	N/A	Good	Active
764206	TEI 49i	Ozone	Winter Park	1170050010	2/3/2017	1	N/A	Good	Unknown
750204	TEI 49i	Ozone	Winter Park	1326659026	9/30/2013	4	N/A	Good	Unknown
749642	TEI 49i	Ozone	Winter Park	1336460150	02/05/2014	4	N/A	Good	Unknown
731315	TEI 49i	Ozone	Winegard Elementary School	0702620337	2/06/2007	11	N/A	Fair	Active
731314	TEI 49i	Ozone	Winegard Elementary School	0702620338	2/06/2007	11	N/A	Fair	Unknown
755736	TEI 48i	СО	Winter Park	1500163900	2/24/2015	3	N/A	Good	Unknown
755737	TEI 48i	СО	Winter Park	1500163901	2/24/2015	3	N/A	Good	Unknown
764204	TEI 48i	СО	Winter Park	1170050008	1/31/2017	1	N/A	Good	Unknown
764205	TEI 48i	СО	Winter Park	1170050009	2/1/2017	1	N/A	Good	Active
750205	TEI 43i	SO2	Winter Park	JC1320600867	9/30/2013	4	N/A	Good	Unknown
766205	TEI 43i	SO2	Winter Park	1172550003	9/26/2017	0	N/A	Good	Active
741524	TEI 42i	NO2	Winter Park	1106147374	2/24/2011	7	N/A	Good	Unknown
755738	TEI 42i	NO2	Winter Park	1500163902	2/24/2015	3	N/A	Good	Unknown
751896	TEI 42i	NO2	Winter Park	1336460152	1/28/2014	4	N/A	Good	Unknown
766204	TEI 42i	NO2	Winter Park	1172550002	9/26/2017	0	N/A	Good	Active
747312	TEI 111	Zero Air	Winter Park	1227254852	10/16/2012	5	N/A	Good	Unknown
755740	TEI 111	Zero Air	Winter Park	1500163903	2/24/2015	3	N/A	Good	Active
750203	TEI 111	Zero Air	Winter Park	1326659028	9/30/2013	4	N/A	Good	Unknown
755739	TEI 146i	Gas Blender	Winter Park	1500163897	2/24/2015	3	N/A	Good	Active
747329	TEI 146i	Gas Blender	Winter Park	1227254853	10/16/2012	5	N/A	Good	Unknown
761065	Agilaire 8872	Data Logger	Winter Park	0550	3/15/2016	2	N/A	Good	Active
761066	Agilaire 8872	Data Logger	Winter Park	0551	3/15/2016	2	N/A	Good	Unknown
761067	Agilaire 8872	Data Logger	Winegard Elementary School	0548	3/15/2016	2	N/A	Good	Active

761068	Agilaire 8872	Data Logger	McCrory Place - Air Lab	0549	3/15/2016	2	N/A	Good	Unknown
750381	TEI 5014i	Particulates	Winter Park	CM13351002	10/04/2013	4	N/A	Good	Active
755028	TEI 5014i	Particulates	Winter Park	CM14291008	10/22/2014	3	N/A	Good	Unknown
755027	TEI 5014i	Particulates	Winter Park	CM14291007	10/22/2014	3	N/A	Good	Active
762294	TEI 5014i	Particulates	Winter Park	CM16131005	09/15/2016	1	N/A	Good	Unknown

Palm Beach County											
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status		
101612210000000	Agilaire 8832	Data Logger	DOH Palm Beach Office	A0633	06/27/05	13	\$5,280.00	Good	Backup		
101612220000000	Agilaire 8832	Data Logger	Delray Beach	A1030	06/27/05	13	\$5,280.00	Good	Active		
101612230000000	Agilaire 8832	Data Logger	DOH Palm Beach Office	A1028	06/27/05	13	\$5,280.00	Good	Backup		
101612240000000	Agilaire 8832	Data Logger	DOH Palm Beach Office	A1031	06/27/05	13	\$5,280.00	Good	Backup		
101641040000000	Agilaire 8832	Data Logger	Belle Glade	A1201	11/28/05	13	\$6,020.00	Good	Active		
101747580000000	Agilaire 8832	Data Logger	Lantana Preserve	A2821K	09/29/08	10	\$6,865.00	Good	Active		
10204151	Alicat MB- 500SCCM	Flow meter	DOH Palm Beach Office	MB-500SCCM-D/5M	05/24/17	1	\$1,264.00	New	Active		
101350090000000	BGI Inc	PM sampler	DOH Palm Beach Office	1662	10/16/00	18	\$8,539.03	Good	Inactive		
K02660000000000	Bios International Corporation	Flow meter	DOH Palm Beach Office	B4702001144	04/07/93	26	\$2,321.15	Fair	Active		
101723950000000	Bios International Corporation	Flow meter	DOH Palm Beach Office	112349	09/30/07	11	\$2,000.00	Fair	Active		
101641050000000	Bios International Corporation	Flow Calibrator	DOH Palm Beach Office	105982	11/30/05	13	\$4,000.00	Good	Active		
101641060000000	Bios International Corporation	Flow Calibrator	DOH Palm Beach Office	106379	11/30/05	13	\$4,000.00	Good	Active		
101971800000000	Dell	Computer-Air Vision Server	DOH Palm Beach Office	24SHT52	07/23/15	3	\$1,692.92	Good	Active		
101887320000000	Environics 6103	Ozone Primary	Lantana Preserve	4595	11/13/09	9	\$7,824.00	Fair	Backup		
101887330000000	Environics 6103	Ozone Primary	Lantana Preserve	4594	11/13/09	9	\$7,824.00	Fair	Backup		
101641080000000	Environics 6100	Flow Calibrator	DOH Palm Beach Office	3702	12/06/05	13	\$8,415.00	Fair	Backup		
101641690000000	Environics 6100	Flow Calibrator	DOH Palm Beach Office	3830	09/12/06	13	\$8,415.00	Fair	Backup		
101679960000000	Environics 6100	Flow Calibrator	Lantana Preserve	3885	12/04/06	13	\$8,415.00	Fair	Active		
101985940000000	Mesa Laboratory	Tetra Cal	DOH Palm Beach Office	149651	8/1/2016	2	\$2,300.00	Good	Active		
101723940000000	Met One Instrument	BAM 1020 Particulate Sampler	Belle Glade	G6214	10/01/07	11	\$21,970.00	Fair	Active		
101759260000000	Met One Instrument	BAM 1020 Particulate Sampler	DOH Palm Beach Office	H8630	02/23/09	9	\$14,300.00	Good	Backup		

101826130000000	Met One Instrument	BAM 1020 Particulate	Delray Beach	K18547	12/09/10	8	\$12,452.60	Good	Active
		Sampler							
101350160000000	Sartorius	Balance	DOH Palm Beach Office	12008133	09/28/00	18	\$4,459.00	Good	Inactive
J03566000000000	Thermo Environmental T111	Zero Air System	DOH Palm Beach Office	111-34508-248	09/13/91	27	\$2,783.50	Fair	Backup
101358770000000	Thermo Environmental T111	Zero Air System	Lantana Preserve	11161759-333	11/02/98	20	\$3,990.00	Fair	Active
101612260000000	Thermo Environmental T111	Zero Air System	DOH Palm Beach Office	0517912030	06/27/05	13	\$2,970.00	Fair	Inactive
101612270000000	Thermo Environmental T111	Zero Air System	DOH Palm Beach Office	N/A	06/27/05	13	\$1,188.00	Fair	Inactive
101612840000000	Thermo Environmental	42i NO2 analyzer	DOH Palm Beach Office	0601213919	11/16/05	13	\$9,733.50	Fair	Inactive
101723960000000	Thermo Environmental	TEI 43i SO2 analyzer	DOH Palm Beach Office	CM07350001	10/08/07	11	\$9,775.50	Fair	Inactive
101747450000000	Thermo Environmental	42i NO2 analyzer	DOH Palm Beach Office	0816130476	05/01/08	10	\$10,706.50	Fair	Inactive
101612440000000	Thermo Environmental	Partisol PM2.5 2025	Delray Beach	21927	01/02/07	11	\$12,840.00	Good	Active
101612830000000	Thermo Environmental	Ozone analyzer 49i	DOH Palm Beach Office	0601213850	11/16/05	13	\$6,673.50	Good	Backup
101679750000000	Thermo Environmental	Ozone analyzer 49i	DOH Palm Beach Office	0711721591	04/11/07	11	\$6,777.00	Good	Backup
101679900000000	Thermo Environmental	TEI CO analyzer 48i	DOH Palm Beach Office	0703320497	01/26/07	11	\$9,085.50	Good	Inactive
101747430000000	Thermo Environmental	2025 PM Sampler	DOH Palm Beach Office	2025B2221502805	06/16/08	10	\$12,464.95	Good	Inactive
101759250000000	Thermo Environmental	Ozone Primary 49iPS	Lantana Preserve	0906335234	02/23/09	9	\$10,165.00	Good	Active
101759340000000	Thermo Environmental	TEI 49i Analyzer 49i	Lantana Preserve	0908635705	04/06/09	9	\$7,533.50	Good	Active
101920710000000	Thermo Environmental	2025 PM Sampler 2025i	DOH Palm Beach Office	2025i-2036671303	04/29/13	5	\$13,200.50	Good	Backup
101985920000000	Thermo Environmental/5014i	PM 2.5 Sampler	DOH Palm Beach Office	CM16321023	8/1/2016	2	\$20,665.00	Good	Active
101985930000000	Thermo Environmental/5014i	PM Sampler	DOH Palm Beach Office	CM16321022	8/1/2016	2	\$20,665.00	Good	Active
101971550000000	Thermo Environmental	Ozone Analyzer 49i	DOH Palm Beach Office	1504864522	09/30/16	2	\$18,245.00	Good	Inactive
101553730000000	Thermo Environmental	TEI CO analyzer	DOH Palm Beach Office	335203744	01/08/04	14	\$8,559.00	Poor	Inactive

101679970000000	Teledyne/API	API 703 Ozone Primary	Lantana Preserve	0058	10/31/06	12	\$8,550.00	Fair	Backup
101871770000000	Teledyne/API	NOX analyzer	Lantana Preserve	205	12/02/11	7	\$10,695.00	Good	Active
101971560000000	Teledyne/API	Teledyne/API	DOH Palm Beach Office	1818	02/27/15	3	\$12,215.80	Good	Backup
G01788000000000	Tisch Environmental, Inc	Tisch Environ OUFF sampler	DOH Palm Beach Office	13905	01/22/91	27	\$1,925.00	Fair	Inactive
101747340000000	Wells Cargo	Wells Cargo	Belle Glade	1WC200G238305845	06/03/08	10	\$5,625.00	Good	Active
101986090000000	Thermo Environmental	Zero Air System	DOH Palm Beach Office	1162220064	9/1/2016	2	\$4,240.00	Good	Backup
N/A	Agilaire/8832	Data Logger	DOH Palm Beach Office	0632	09/29/08	10	\$7,350.00	Good	Inactive
PBCHD 0265	DELL	DELL	Lantana Preserve	DY4HM02	N/A	N/A	N/A	Good	Active
10198608000000	Thermo Environmental/146i	Flow calibrator	DOH Palm Beach Office	1162220065	9/1/2016	2	\$18,144.65	Good	Active

			Pin	ellas County					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
N/A	Agilaire 8872	Datalogger	Skyview	411	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Derby Lane	309	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Azalea	307	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Gateway	311	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Clearwater	308	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	East Lake	310	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Oakwood	312	N/A	4	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Sawgrass	0412	N/A	3	\$6,800.00	Good	Active
N/A	Agilaire 8872	Datalogger	Office	N/A	N/A	1	\$6,800.00	Good	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	15	\$6,800.00	Fair	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	15	\$6,800.00	Fair	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	14	\$6,800.00	Fair	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	14	\$6,800.00	Fair	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	19	\$6,800.00	Fair	Backup
N/A	ESC 8816	Datalogger	Office	N/A	N/A	19	\$6,800.00	Fair	Backup
N/A	TEI 42i	NOX	Azalea	11636300019	N/A	1	\$15,000.00	Good	Active
N/A	TEI42i	NOX	N/A	CM08260023	N/A	8	N/A	Fair	Backup
N/A	API 500U	NO2	Sawgrass	108	N/A	2	\$27,500.00	Good	Active
N/A	API 300	СО	Gateway	2425	N/A	1	\$9,100.00	Good	Active
N/A	API 300U	CO trace	Sawgrass	242	N/A	2	\$13,600.00	Good	Active
N/A	API400E	Ozone	East Lake	2560	N/A	6	\$8,100.00	Good	Active
N/A	API400E	Ozone	Azalea	3071	N/A	1	\$8,100.00	Good	Active
N/A	APIT400E	Ozone	Clearwater	2545	N/A	6	\$8,100.00	Good	Active
N/A	APITT400	Ozone	N/A	N/A	N/A	7	\$8,100.00	Good	Backup
N/A	API T703E	O3 primary	East Lake	61	N/A	8	\$11,000.00	Good	Active
N/A	API T703E	O3 primary	Azalea	332	N/A	4	\$11,000.00	Good	Active
N/A	API T703E	O3 primary	Clearwater	331	N/A	4	\$11,000.00	Good	Active
N/A	API T703E	O3 primary	N/A	N/A	N/A	5	\$11,000.00	Good	Backup
N/A	API 700U	calibrator	Sawgrass	251	N/A	2	\$26,000.00	Good	Active
N/A	TEI43i	SO2	Oakwood	1170120019	N/A	1	\$12,500.00	Good	Active
N/A	TEI43i	SO2	Derby Lane	1163630020	N/A	1	\$12,500.00	Good	Active
N/A	TEI43C	SO2	N/A	43C-55928-305	N/A	17	N/A	Fair	Backup
N/A	TEI43C	SO2	N/A	43C-66211-351	N/A	16	N/A	Fair	Backup

N/A	TEI48C	CO	N/A	48C-79045-391	N/A	14	N/A	Fair	Backup
N/A	Environics 6100	Calibrator	Sawgrass	65512	N/A	2	\$11,000.00	Good	Active
N/A	Environics 6100	Calibrator	Azalea	3942	N/A	5	\$11,000.00	Good	Active
N/A	Environics 6100	Calibrator	Derby Lane	6551	N/A	2	\$11,000.00	Good	Active
N/A	Environics 6103	Calibrator	Gateway	2818	N/A	7	\$11,000.00	Good	Active
N/A	Environics 6100	Calibrator	Oakwood	6186	N/A	2	\$11,000.00	Good	Active
N/A	R M Young 5305	Wind System	Sawgrass	5	N/A	2	\$1,100.00	Good	Active
N/A	R M Young 5305	Wind System	Azalea	2	N/A	7	\$1,100.00	Good	Active
N/A	R M Young 5305	Wind System	East Lake	12	N/A	1	\$1,100.00	Good	Active
N/A	R M Young 5305	Wind System	Skyview	1	N/A	2	\$1,100.00	Good	Active
N/A	Aluma Tower 10m	Wind Tower	Skyview	N/A	N/A	15	\$2,000.00	Fair	Active
N/A	Aluma Tower 10m	Wind Tower	East Lake	N/A	N/A	10	\$2,000.00	Fair	Active
N/A	Aluma Tower 10m	Wind Tower	Azalea	N/A	N/A	20	\$2,000.00	Fair	Active
N/A	Aluma Tower 10m	Wind Tower	Sawgrass	N/A	N/A	2	\$4,100.00	Good	Active
N/A	API 70H	Zero Air	Sawgrass	136	N/A	2	\$7,500.00	Good	Active
N/A	API 70H	Zero Air	Azalea	240	N/A	1	\$7,500.00	Good	Active
N/A	TEI FRM 2025	PM2.5 Sampler	Sandy Lane	2025B223420808	N/A	9	\$12,500.00	Fair	Active
N/A	TEI FRM 2025	PM2.5 Sampler	Azalea	2025B219340701	N/A	10	\$12,500.00	Fair	Active
N/A	TEI FRM 2025	PM2.5 Sampler	N/A	2025B222800806	N/A	9	\$12,500.00	Fair	Backup
N/A	API 640X	PM10 Sampler/PM2.5 Sampler	Azalea	218	N/A	0	\$37,000.00	Good	Active
N/A	General metals 1200	PM10 Sampler	Woodlawn	3762	N/A	23	\$7,500.00	Fair	Active
N/A	General metals 1200	PM10 Sampler	County Motorpool	104	N/A	23	\$7,500.00	Fair	Active
N/A	General metals 1200	PM10 Sampler	County Motorpool	103	N/A	23	\$7,500.00	Fair	Active
N/A	General metals 1200	PM10 Sampler	Skyview	503	N/A	23	\$7,500.00	Fair	Active
N/A	General metals 1200	PM10 Sampler	N/A	N/A	N/A	23	\$7,500.00	Fair	Backup
N/A	TEI 1405	TEOM	East Lake	1405A235701603	N/A	2	\$23,000.00	Good	Active
N/A	Magee 633	Aethalometer	Skyview	AE33-S01-00107	N/A	4	\$26,800.00	Good	Active
N/A	Magee 633	Aethalometer	Sawgrass	AE33-SO3-00336	N/A	2	\$30,000.00	Good	Active
N/A	Shelter	Coastal	Derby Lane	N/A	N/A	15	N/A	Fair	Active
N/A	Shelter	N/A	Clearwater site	N/A	N/A	32	N/A	Fair	Active
N/A	Shelter	Adv. Modular	Gateway	N/A	N/A	15	N/A	Fair	Active
N/A	Shelter	GE Capitol	East Lake	N/A	N/A	10	N/A	Fair	Active
N/A	Shelter	Robin Builders	Skyview	N/A	N/A	19	N/A	Fair	Active
N/A	Shelter	Robin Builders	Azalea Park	N/A	N/A	19	N/A	Fair	Active

N/A	Shelter	N/A	Oakwood	N/A	N/A	30	N/A	Fair	Active
N/A	Shelter	N/A	Sawgrass Park	N/A	N/A	2	\$27,500.00	Good	Active
N/A	Shelter	Adv. Modular	Backup (at Fleet)	N/A	N/A	17	N/A	Fair	Backup

			Sarasot	a County					
Property /Identification No.	Manufacturer and Model No.	Description	Location	Serial No.	Acquisition Date	Age	Initial Cost	Condition	Status
40059491	Thermo 49i	Ozone Analyzer	Paw Park	CM09190034	6/25/2009	9	\$ 7,930.00	Fair	Active
40059492	Thermo 49i-PS	Ozone Calibrator	Paw Park	916736286	6/25/2009	9	\$ 11,550.00	Fair	Active
N/A	Thermo 1405	Particulate Sampler	Paw Park	1405A233811512	2016	2	\$ 16,975.00	Good	Active
40062204	Teledyne T700	MultiGas Calibrator	Paw Park	670	6/5/2013	5	\$ 15,138.40	Good	Active
40062203	Teledyne T200	NOx Analyzer	Paw Park	776	6/5/2013	5	\$ 11,372.80	Good	Active
40064632	Teledyne T701	Zero Air Generator	Paw Park	64	9/19/2014	4	\$ 4,375.00	Good	Active
40064691	Agilaire 8872	Data Logger	Paw Park	335	10/31/2014	4	\$ 6,990.00	Good	Active
40051234	RM Young 05103VP	Wind Vane	Paw Park	58190	9/30/2003	15	\$ 1,039.50	Fair	Active
40067751	Thermo 49i	Ozone Analyzer	Lido	1162290005	2016	2	\$ 9,337.50	Good	Active
40068125	Thermo 49i-PS	49i-PS	Lido	1171300029	2017	1	\$ 13,581.00	Good	Active
40064692	Agilaire 8872	Data Logger	Lido	334	10/31/2014	4	\$ 6,990.00	Good	Active
40060203	Teledyne 400e	Ozone Analyzer	Office	2529	6/29/2010	8	\$ 7,035.00	Fair	Back Up
40060204	Teledyne 703e	Ozone Calibrator	Office	276	6/29/2010	8	\$ 9,166.00	Fair	Back Up
40051233	RM Young 05103VP	Wind Vane	Lido	58043	9/30/2003	15	\$ 1,040.00	Fair	Active
40058795	Thermo TEOM 1405	Particulate Sampler	Jackson	1405A202460809	9/30/2008	10	\$ 18,911.00	Fair	Active
40064631	Thermo 49i	Ozone Analyzer	Jackson	1426962861	9/11/2014	4	\$ 9,150.00	Good	Active
40064630	Thermo 49i-PS	Ozone Calibrator	Jackson	1426962860	9/11/2014	4	\$ 12,490.00	Good	Active
40063474	Agilaire 8872	Data Logger	Jackson	184	11/21/2013	5	\$ 6,495.00	Good	Active
40051235	RM Young 05103VP	Wind Vane	Jackson	58191	9/30/2003	15	\$ 1,039.50	Fair	Active
40063935	Thermo 2025i	Particulate Sampler	Bee Ridge Park	2025I205681402	4/3/2014	4	\$ 15,620.00	Good	Active
40064694	Thermo 2025i	Particulate Sampler	Office	2025I207091410	12/17/2014	4	\$ 15,620.00	Good	Back Up
40056961	Thermo TEOM 1400	Particulate Sampler	Bee Ridge Park	140AB267800706	9/30/2007	11	\$ 19,637.50	Fair	Active
N/A	Teledyne T640	Particulate Sampler	Bee Ridge Park	212	2017	1	\$ 21,000.00	Good	Active
N/A	Teledyne T640	Enclosure	Bee Ridge Park	N/A	2017	1	\$ 6,500.00	Good	Unknown
40066774	Agilaire 8872	Data Logger	Office	542	2016	2	\$ 6,950.00	Good	Back Up
40050210	Thermo 49C-PS	Ozone Analyzer	Office	49CPS77959387	4/25/2003	15	\$ 9,030.00	Fair	Back Up
40050209	Thermo 49C	Ozone Calibrator	Office	49C77958387	4/25/2003	15	\$ 7,060.00	Fair	Back Up
40038151	ESC 8816	Data Logger	Office	1665	2/17/1998	20	\$ 2,250.00	Fair	Back Up
40051472	Thermo 111	Zero Air Generator	Office	326802150	11/14/2003	15	\$ 4,198.23	Fair	Back Up
40052744	Thermo 111	Zero Air Generator	Office	427408888	9/30/2004	14	\$ 2,970.00	Fair	Back Up



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

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DCT 2 2 2010

Mr. Jeff Koerner Director Division of Air Resources Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida, 32399-2400

Dear Mr. Koerner:

Thank you for submitting the state of Florida's 2018 annual ambient air monitoring network plan (Network Plan), which we received on June 28, 2018. The Network Plan is required by 40 Code of Federal Regulations (CFR) §58.10 and covers the ambient air monitoring network operated by the Florida Department of Environmental Protection (FDEP) and the local air quality agencies in Florida. The U.S. Environmental Protection Agency understands that the FDEP provided the public a 30-day inspection and comment period from May 24, 2018 through June 25, 2018 prior to this submission and that no public comments were received.

The EPA approves the Florida 2018 Network Plan and the proposed monitoring network changes. We have enclosed comments on the Network Plan and details of our review. The EPA appreciates the FDEP's continued efforts to ensure that siting criteria requirements are met throughout the network. The EPA requests that in the 2019 Network Plan, the FDEP propose a plan to meet the siting criteria requirements at the four sites identified as deficient by either reconfiguring, relocating, or proposing to discontinue each of the deficient sites.

In its response to FDEP's 2016-2017 Network Plan, the EPA approved FDEP's proposal to relocate Royal Palm Beach site in Palm Beach County (AQS ID: 12-099-0009), which monitors O<sub>3</sub>, PM<sub>2.5</sub>, and continuous PM<sub>2.5</sub>, to a new nearby site, Lamstein Lane (AQS ID: 12-099-0022). The Royal Palm Beach site stopped collecting data in October 2015, however, the EPA understands that Palm Beach County has not yet completed the installation of the Lamstein Lane site, and monitoring has not yet begun. Since the Lamstein Lane site is part of the approved state or local air monitoring station (SLAMS) network, it is important that the site begin operating as soon as possible.

Thank you for working with us to monitor air pollution and promote clean air in Florida. If you have any questions or concerns, please contact Gregg Worley at (404) 562-9141 or Daniel Garver at (404) 562-9839.

Sincerely,

filed for

Beverly H. Banister Director Air, Pesticides and Toxics Management Division

Enclosure

cc: Ms. Sandra Veazey Administrator, Office of Air Monitoring, Florida Department of Environmental Protection

Mr. Jeffery Halsey Director, Air Quality Division, Broward County

Mr. Bernardo Bieler Chief, Miami-Dade County Air Quality Management Division

Mr. Michael C. Williams, PE Air Branch Manager, Environmental Quality Division, City of Jacksonville

Mr. Ajaya Satyal Director, Pinellas County Air Quality Division

Mr. Laxmana Tallam Palm Beach County Division of Environmental Health and Engineering Services, Air Pollution Control Section

Mr. Greg Blanchard Air Quality Manager, Manatee County Environmental Management Department

Mr. John Hickey, P.E. Manager, Sarasota County Air & Water Quality

Mr. John Deatrick EPA Region 4 SESD

## 2018 State of Florida Ambient Air Monitoring Network Plan U. S. EPA Region 4 Comments and Recommendations

This document contains the U.S. Environmental Protection Agency comments and recommendations on the state of Florida's 2018 ambient air monitoring network plan (Network Plan). Ambient air monitoring rules, which include regulatory requirements that address network plans, data certification, and minimum monitoring requirements, among other requirements, are found in 40 CFR Part 58. Minimum monitoring requirements for criteria pollutants are listed in 40 CFR Part 58, Appendix D. Minimum monitoring requirements are listed for ozone (O<sub>3</sub>), particulate matter less than 2.5 microns (PM<sub>2.5</sub>), particulate matter less than 10 microns (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and lead (Pb).

The minimum monitoring requirements are based on core based statistical area (CBSA) boundaries as defined by the U.S. Office of Management and Budget (OMB), July 1, 2017, population estimates from the U.S. Census Bureau, and historical ambient air monitoring data. Minimum monitoring requirements for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>, only apply to metropolitan statistical areas (MSAs), which are a subset of CBSAs. OMB currently defines 29 CBSAs in the state of Florida. These CBSAs and the respective July 1, 2017, population estimates from the U.S. Census Bureau are shown in Table 1.

CBSA Name	CBSA Type	Population
Miami-Fort Lauderdale-West Palm Beach, FL	Metropolitan Statistical Area	6,158,824
Tampa-St. Petersburg-Clearwater, FL	Metropolitan Statistical Area	3,091,399
Orlando-Kissimmee-Sanford, FL	Metropolitan Statistical Area	2,509,831
Jacksonville, FL	Metropolitan Statistical Area	1,504,980
North Port-Sarasota-Bradenton, FL	Metropolitan Statistical Area	804,690
Cape Coral-Fort Myers, FL	Metropolitan Statistical Area	739,224
Lakeland-Winter Haven, FL	Metropolitan Statistical Area	686,483
Deltona-Daytona Beach-Ormond Beach, FL	Metropolitan Statistical Area	649,202
Palm Bay-Melbourne-Titusville, FL	Metropolitan Statistical Area	589,162
Pensacola-Ferry Pass-Brent, FL	Metropolitan Statistical Area	487,784
Port St. Lucie, FL	Metropolitan Statistical Area	473,429
Tallahassee, FL	Metropolitan Statistical Area	382,627
Naples-Immokalee-Marco Island, FL	Metropolitan Statistical Area	372,880
Ocala, FL	Metropolitan Statistical Area	354,353
Gainesville, FL	Metropolitan Statistical Area	284,687
Crestview-Fort Walton Beach-Destin, FL	Metropolitan Statistical Area	271,346
Panama City, FL	Metropolitan Statistical Area	199,723
Punta Gorda, FL	Metropolitan Statistical Area	182,033
Sebastian-Vero Beach, FL	Metropolitan Statistical Area	154,383
Homosassa Springs, FL	Metropolitan Statistical Area	145,647
The Villages, FL	Metropolitan Statistical Area	125,165
Sebring, FL	Metropolitan Statistical Area	102,883
Key West, FL	Micropolitan Statistical Area	77,013
Palatka, FL	Micropolitan Statistical Area	73,464
Lake City, FL	Micropolitan Statistical Area	69,612
Okeechobee, FL	Micropolitan Statistical Area	41,605
Clewiston, FL	Micropolitan Statistical Area	40,347
Arcadia, FL	Micropolitan Statistical Area	36,862
Wauchula, FL	Micropolitan Statistical Area	27,411

Table 1: Core Based Statistical Areas and July 1, 2017 Population Estimates

## Proposed Monitoring Network Changes 40 CFR §58.10(b), 58.14

In the Network Plan, the FDEP proposed several changes to its air monitoring network. A list of these proposed changes, the EPA's approval or disapproval, and a summary of the EPA's rationale for approving or disapproving the proposed changes is provided in Appendix A.

The Network Plan proposes several new monitoring sites and relocations of monitoring sites:

- Photochemical Air Monitoring Station (PAMS) measurements will be added to the existing Daniela Banu NCore site in Broward County (AQS ID: 12-011-0034) and the existing Sydney NCore site in Hillsborough County (AQS ID: 12-057-3002) as required, beginning July 1, 2019. The Broward County and Hillsborough County local agencies will form a new PAMS Primary Quality Assurance Organization (PQAO) for the PAMS measurements.
- 2. The Dr. Von D. Mizell-Eula Johnson State Park site in Broward County (AQS ID: 12-011-0082), which monitors O<sub>3</sub> and NO<sub>2</sub>, will be relocated on the same property to meet siting criteria requirements.
- 3. The Pompano Highlands site in Broward County (AQS ID: 12-011-2003), which monitors O<sub>3</sub> and PM<sub>2.5</sub>, will be relocated on the same property to meet siting criteria requirements.
- 4. The PM<sub>10</sub> monitor at the Roselle site in Jacksonville (AQS ID: 12-031-0084) will be relocated to the nearby existing Pepsi Place Near-Road Site (AQS ID: 12-031-0108). The EPA understands from conversations with FDEP that this PM<sub>10</sub> monitor will subsequently be proposed to move to the Mandarin site (AQS ID: 12-031-0098), and that this change will be proposed in an addendum to the Network Plan that will be submitted to EPA for approval after the required 30-day public comment period.
- 5. A continuous non-federal equivalent method (FEM) PM<sub>2.5</sub> monitor will be added to the Kendall site in Miami-Dade County (AQS ID: 12-086-0034).
- 6. A continuous FEM PM<sub>2.5</sub> monitor will be added to the St. Petersburg College site in Pinellas County (AQS ID:12-103-0018).
- 7. A continuous FEM PM<sub>2.5</sub> monitor will be added to the Sanford site in Orange County (AQS ID: 12-117-1002).

For each of these proposed new or relocated sites, the FDEP has provided all the information required by 40 CFR §58.10(b) and has provided evidence that the new monitoring site locations meet siting criteria requirements found in 40 CFR Part 58, Appendix E. Each of these new sites, site relocations, or addition of monitors to existing sites is approved. For each of the relocated sites that are comparable to the NAAQS, the EPA approves the use of a combined dataset from the previous location and the new location for calculating design values.

The Network Plan proposes to discontinue operation of the following monitors:

- 1. The CO special purpose monitor (SPM) and SO<sub>2</sub> monitor at the Southside Playground site in Jacksonville (AQS ID: 12-031-0080).
- 2. The CO monitor at the Rosselle site in Jacksonville (AQS ID: 12-031-0084).
- 3. The SO<sub>2</sub> monitor at the Fort Caroline site in Jacksonville (AQS ID: 12-031-0097).

- 4. The PM<sub>2.5</sub> continuous non-FEM SPM at the Ellyson Industrial Park site in Escambia County (AQS ID: 12-033-0004).
- 5. The CO SPM at the Kendall site in Miami-Dade County (AQS ID: 12-086-0034). This discontinuation was previously approved by the EPA in the 2016-2017 Network Plan.
- 6. The PM<sub>2.5</sub> monitor at the Sandy Lane site in Pinellas County (AQS ID: 12-103-1009).
- 7. The PM<sub>10</sub> collocated quality assurance (QA) sampler at the County Motorpool site in Pinellas County (AQS ID: 12-103-3004).
- 8. The O<sub>3</sub> monitor at the Port Orange site in Volusia County (AQS ID: 12-127-2001).

Each of the state or local air monitoring station (SLAMS) monitors proposed for discontinuation above, with the exception of the Port Orange O<sub>3</sub> monitor, meets the requirements of 40 CFR §58.14(c)(1) for discontinuation. These monitors have shown attainment with the applicable NAAQS during the previous five years. In addition, there is a probability of less than 10 percent that these monitors would exceed 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past. The monitors are not specifically required by an attainment plan or maintenance plan and the requirements in 40 CFR Part 58, Appendix D will continue to be met after these discontinuations. While the Port Orange O<sub>3</sub> monitor does not meet any of the specific conditions for discontinuation listed in 40 CFR §58.14(c)(1) through (6), this monitor is approved for discontinuation under the authority for the EPA to approve other monitor discontinuations on a case-by-case basis as described in 40 CFR §58.14(c). Details of the EPA's rationale for this approval are discussed in the O<sub>3</sub> monitoring network section below. Each of the SLAMS monitors listed above are approved for discontinuation.

For the SPMs proposed to be discontinued listed above, the EPA acknowledges the FDEP's decision to discontinue them. When possible, the monitors listed above should be operated until the end of 2018 to collect a complete calendar year of data. The EPA also requests that the FDEP enter the appropriate end dates for these monitors in AQS.

Section 3.0 of the Network Plan states that "DEP reserves the right to make unplanned network changes in the event a site needs to be closed or relocated due to events beyond our control." The EPA supports the FDEP's ability to conduct special purpose monitoring, and will work with the FDEP in making any changes to the network that are needed due to unforeseen circumstances. The EPA expects that any monitors included in the plan will be operated for the upcoming calendar year, and that any monitor discontinuations, including SPMs, be included in future network plans. Also, SPMs that are identified in the plan as meeting the requirements of 40 CFR Part 58 must meet the same data completeness and other requirements as SLAMS monitors. Other unforeseen network changes may be submitted to the EPA for approval as an addendum to the Network Plan. The EPA also requests that the FDEP notify the EPA as soon as it is known that a monitor must be discontinued or relocated for unforeseen reasons. Any such addendum must meet the Network Plan requirements found in 40 CFR §58.10, including the 30-day public comment period requirement.

In the 2016-2017 Network Plan, the EPA approved FDEP's proposal to relocate Royal Palm Beach site in Palm Beach County (AQS ID: 12-099-0009), which monitors O<sub>3</sub>, PM<sub>2.5</sub>, and continuous PM<sub>2.5</sub>, to a new nearby site, Lamstein Lane (AQS ID: 12-099-0022). However, the EPA understands that Palm Beach County has not yet completed the installation of the Lamstein Lane site due to delays in permitting and contracting, and monitoring has not yet begun. The Royal Palm Beach site stopped collecting data in October 2015, when access to the property was lost. Since the Lamstein Lane site is part of the approved SLAMS network, it is important that the site begin operation as soon as possible. The EPA requests that the FDEP and Palm Beach County notify the EPA as soon as the site is operational. The EPA is also willing to provide assistance to Palm Beach County to expedite the installation of the site.

### **Operating Schedules 40 CFR §58.12**

The Network Plan proposes several changes to monitor operating schedules, which are summarized in Table 2 below.

CBSA Name	Site Name	AQS ID	Pollutant	Current Operating Schedule	Proposed Operating Schedule
Miami-Fort	Daniela Banu NCore	12 011 0024	DM	E	1 : 2 docum
Lauderdale-West Palm Beach, FL	Daniela Banu NCore	12-011-0034	PM <sub>2.5</sub>	Every day	1-in-3 days
Miami-Fort					
Lauderdale-West	Coconut Creek	12-011-5005	$PM_{2.5}$	Every day	1-in-3 days
Palm Beach, FL					
Tampa-St.					
Petersburg-	Sydney NCore	12-057-3002	$PM_{2.5}$	Every day	1-in-3 days
Clearwater, FL					

Table 2: Proposed	Operating	Schedule Cha	nges
Table 2. Tropose	operating	beneuule Cha	nges

EPA has reviewed these proposed changes and determined that the minimum operating schedule requirements will continue to be met after they are made. The operating schedule changes listed in Table 2 are approved. The monitoring network proposed in the Network Plan meets the required operating schedules for all continuous analyzers and all manual Pb, PM<sub>10</sub>, PM<sub>2.5</sub>, and PM<sub>2.5</sub> Speciation Trends Network (STN) monitors.

# Air Quality Index (AQI) Reporting 40 CFR §58.50

AQI reporting is required in MSAs with populations over 350,000. There are 14 MSAs in the state that are required to report an AQI: Miami-Fort Lauderdale-West Palm Beach, Tampa-St. Petersburg-Clearwater, Orlando-Kissimmee-Sanford, Jacksonville, North Port-Sarasota-Bradenton, Cape Coral-Fort Myers, Lakeland-Winter Haven, Deltona-Daytona Beach-Ormond Beach, Palm Bay-Melbourne-Titusville, Pensacola-Ferry Pass-Brent, Port St. Lucie, Tallahassee, Naples-Immokalee-Marco Island, and Ocala. The Network Plan includes a link on Page 3 to the FDEP website where the AQI and real-time air quality data are reported (www.dep.state.fl.us/air/air\_quality/airdata.htm). The FDEP also reports real-time air quality data to the EPA's AirNow website (airnow.gov) from almost all of its continuous monitors, not just those in MSAs with required reporting. The EPA appreciates the FDEP's commitment to providing real-time air quality information to the public. The AQI reporting requirements are currently met in all areas.

## National Core (NCore) Monitoring Network 40 CFR Part 58 Appendix D, 3.0

FDEP has designated three NCore sites: Sydney Road in Tampa (AQS ID: 12-057-3002), Daniela Banu in Broward County (AQS ID: 12-011-0034), and St. Marks National Wildlife Refuge (AQS ID: 12-129-0001), a rural NCore site on the coast in Wakulla County. These sites satisfy the requirements for NCore monitoring and have been approved by the EPA's Office of Air Quality Planning and Standards.

## O<sub>3</sub> Monitoring Requirements 40 CFR Part 58, Appendix D, 4.1 and Table D-2

As discussed in the Proposed Monitoring Network Changes section above, the Port Orange O<sub>3</sub> monitor (AQS ID: 12-127-2001) is approved for discontinuation. While the Port Orange O<sub>3</sub> monitor has a probability of greater than 10 percent of exceeding 80 percent of the NAAQS in the next three years based on the EPA's analysis, the site has still shown attainment of the O<sub>3</sub> NAAQS in the previous five years and has not historically measured the highest O<sub>3</sub> concentrations in the Deltona-Daytona Beach-Ormond Beach CBSA. While this monitor does not meet any of the specific conditions for discontinuation listed in 40 CFR §58.14(c)(1) through (6), under 40 CFR §58.14(c), "[o]ther requests for discontinuation may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements of Appendix D to this part, if any, continue to be met." The proposed O<sub>3</sub> monitoring network in the Network Plan meets the minimum requirement to operate at least one O<sub>3</sub> monitor in the Deltona-Daytona Beach-Ormond Beach MSA because the FDEP will continue to operate O<sub>3</sub> monitors at the Daytona Blind Services (AQS ID: 12-127-5002) and Flagler (AQS ID: 12-035-0004) sites. In the EPA's assessment, the discontinuation of the Port Orange site also does not compromise data collection needed for implementation of the O<sub>3</sub> NAAOS because the Port Orange site has historically measured slightly lower concentrations than the other two sites in the MSA, and the proposed network maintains adequate spatial coverage across the MSA.

The state of Florida's proposed  $O_3$  monitoring network meets the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-2 for all MSAs. Additionally, the proposed  $O_3$  monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

## CO Monitoring Requirements 40 CFR Part 58, Appendix D, 4.2

Beginning January 1, 2015, CO monitoring was required at near-road monitoring sites in CBSAs with populations greater than 2,500,000. CO monitoring at each near-road monitoring site in CBSAs with populations greater than 1,000,000 was required to begin on January 1, 2017. The Network Plan indicates that CO monitoring is ongoing at the Munro St. near-road site (AQS ID: 12-057-0113) in the Tampa-St. Petersburg-Clearwater CBSA and at the Fort Lauderdale near-road site (AQS ID: 12-011-0035) in the Miami-Fort Lauderdale-Miami Beach CBSA. Therefore, the CO monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

## NO<sub>2</sub> Monitoring Requirements 40 CFR Part 58, Appendix D, 4.3

Ambient air monitoring network design criteria for  $NO_2$  are found in Section 4.3 of Appendix D to 40 CFR Part 58. Three types of  $NO_2$  monitoring are required: near-road, area-wide, and Regional Administrator. These types of  $NO_2$  monitoring are described in sections 4.3.2, 4.3.3, and 4.3.4, respectively.

Ambient air monitoring design criteria for near-road NO<sub>2</sub> monitoring sites are found in section 4.3.2 of Appendix D to 40 CFR Part 58. Near-road monitoring stations are currently operating in the following core based statistical areas (CBSAs): two sites in the Miami-Fort Lauderdale-West Palm Beach CBSA (in Broward County and Miami-Dade County), two sites in the Tampa-St. Petersburg-Clearwater CBSA (in Hillsborough County and Pinellas County), and one site in the Jacksonville CBSA.

Near-road NO<sub>2</sub> monitoring is also required in the Orlando-Kissimmee-Sanford CBSA. In 2017, the EPA approved the temporary discontinuation of the I-4 near-road site (AQS ID: 12-095-0009) in Orange County, in the Orlando-Kissimmee-Sanford CBSA. The site is located in a construction area associated with expanding I-4. Severe vibrations from the installation of roadway pillars adjacent to the site have interfered with the operation of the monitors, and, as a result, the site has recorded poor QA/QC results and experienced significant data loss and damage to the monitoring equipment. The Orange County Air Quality Management Section (AQMS) has unsuccessfully tried several strategies to mitigate the adverse effects of the vibrations. There are also concerns that, due to emissions from the nearby construction activities, the data collected at the site during the construction is likely not representative of concentrations in other near-road environments in the area. The EPA, the FDEP, and the Orange County AQMS explored several options to resolve this situation, including relocating the site to several alternate locations. However, no suitable alternate locations along I-4 could be found because the entire interstate corridor is under construction. Also, it was determined that a temporary relocation of the site would be prohibitively expensive for the county, and would not be guaranteed to resolve the construction-related problems. Due to the circumstances beyond the county's control described above, the EPA approved the temporary discontinuation of the I-4 near road monitoring site. Monitoring is required to resume at the site as soon as the construction activities near the site have changed to an extent that the monitors can be operated without risk of damage. EPA requests that FDEP provide an update on the status of the site in the 2019 Network Plan. The EPA approves the near-road NO<sub>2</sub> monitoring network described in the Network Plan

Ambient air monitoring network design criteria for area-wide NO<sub>2</sub> sites are found in section 4.3.3 of 40 CFR Part 58, Appendix D. There are four CBSAs in Florida with required area-wide NO<sub>2</sub> monitoring. These area-wide sites are summarized in Table 3. The area-wide NO<sub>2</sub> monitoring network described in the Network Plan meets the requirements of Section 4.3.3 in all areas.

Table 3: Area-wide	e NO2 Monitoring	Sites
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CBSA Name	County	Site Name	AQS ID
Jacksonville	Duval	Kooker Park	12-031-0032
Miami-Fort Lauderdale-	Broward	John U Lloyd State Park	12-011-8002
Miami Beach			
Orlando-Kissimmee-	Orange	Winter Park	12-095-2002
Sanford			
Tampa-St. Petersburg-	Pinellas	Azalea Park	12-103-0018
Clearwater			

Ambient air monitoring network design criteria for Regional Administrator required NO<sub>2</sub> monitoring, often referred to as RA-40 monitoring, are found in section 4.3.4 of Appendix D to 40 CFR Part 58. Under these provisions Regional Administrators must require a minimum of 40 additional NO<sub>2</sub> monitoring stations nationwide, with a primary focus on siting these monitors in locations to protect susceptible and vulnerable populations. The EPA and the FDEP previously identified the monitor at the Coral Reef site (AQS ID: 12-086-0031) in Miami-Dade County as required under Section 4.3.4. The full list of NO<sub>2</sub> monitors identified by the Regional Administrators can be found on EPA's website at http://www.epa.gov/ttnamti1/svpop.html.

#### SO<sub>2</sub> Monitoring Requirements 40 CFR Part 58, Appendix D, 4.4

Ambient air monitoring network design criteria for SO<sub>2</sub> are found in Section 4.4 of Appendix D to 40 CFR Part 58. This section requires that "The population weighted emissions index (PWEI) shall be calculated by states for each core based statistical area (CBSA)..." The SO<sub>2</sub> monitoring site(s) required in each CBSA will satisfy minimum monitoring requirements if the monitor(s) is sited within the boundaries of the parent CBSA and is of the following site type(s): population exposure, maximum concentration, source-oriented, general background, or regional transport. An SO<sub>2</sub> monitor at an NCore station may satisfy minimum monitoring requirements if that monitor is located within a CBSA with required monitors under Appendix D, Section 4.4.

SO<sub>2</sub> monitoring sites are currently operating in each of the CBSAs with required monitoring based on the PWEI. The PWEI requirements for each CBSA in Florida are summarized in the Network Plan in Table 4.5 on Page 31. The SO<sub>2</sub> monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

#### Pb Monitoring Requirements 40 CFR Part 58, Appendix D, 4.5

Forty (40) CFR Part 58, Appendix D, Section 4.5 requires that "At a minimum, there must be one source-oriented SLAMS site located to measure the maximum Pb concentration in ambient air resulting from each non-airport Pb source which emits 0.50 or more tons per year and from each airport which emits 1.0 or more tons per year..." Monitoring is ongoing as required near Envirofocus Technologies Inc. in Tampa.

In the 2016-2017 Network Plan, the FDEP requested a waiver of the source-oriented Pb monitoring requirement for two sources based on updated air modeling conducted for 2014-2016. The modeling results for these sources are summarized in Table 4.

Company / Owner	Facility Name	2015 Total Pb Emissions (tons)	Maximum Modeled 3-month average (µg/m³)
Duke Energy Florida, LLC	Crystal River Power Fossil Plant	0.9306	0.00032
Tampa Electric Company (TECO)	Big Bend Station	0.6221	0.00060

 Table 4: Lead Source-Monitoring Waiver Requests

The EPA approved source-oriented monitoring waivers for the two sources listed in Table 3 in 2017. These waivers must be renewed in the next five-year network assessment due July 1, 2020, required under 40 CFR §58.10(d). The proposed Pb monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

#### PM<sub>10</sub> Monitoring Requirements 40 CFR Part 58, Appendix A, 3.3.1 40 CFR Part 58, Appendix D, 4.6 and Table D-4

The state of Florida's  $PM_{10}$  monitoring network meets the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-4 for all MSAs. Also, all  $PM_{10}$  collocation requirements for manual methods found in 40 CFR Part 58, Appendix A, Section 3.3.1 are being met. Fifteen percent of each network of manual  $PM_{10}$  methods (at least one site) must be collocated. These collocation requirements are assessed at the PQAO level. The state of Florida and all of its local agencies operate under a single PQAO (FDEP).

The Network Plan proposes changes to the  $PM_{10}$  monitoring methods used at several sites. The existing  $PM_{10}$  manual federal reference method (FRM) samplers are proposed to be replaced with  $PM_{10}$  continuous federal equivalent method (FEM) samplers at the following sites: Daniela Banu NCore (AQS ID: 12-011-0034) and Coconut Creek (AQS ID: 12-011-5005) in Broward County, Miami Fire Station in Miami-Dade County (AQS ID: 12-086-1016), and Azalea Park in Pinellas County (AQS ID: 12-103-0018). These monitoring method changes are approved.

## PM<sub>2.5</sub> Monitoring Requirements 40 CFR Part 58, Appendix A, 3.2.5 40 CFR Part 58, Appendix D, 4.7 and Table D-5

The Network Plan proposes changes to the PM<sub>2.5</sub> monitoring methods used at several sites. The existing PM<sub>2.5</sub> manual FRM samplers and the SPM PM<sub>2.5</sub> continuous non-FEMs are proposed to be replaced with a PM<sub>2.5</sub> continuous FEM sampler at the following sites: Winkler Pump Station (AQS ID: 12-071-0005), Miami Fire Station (AQS ID: 12-086-1016), Baptist Children's Home (AQS ID: 12-105-6006), Bee Ridge (AQS ID: 12-115-0013), and Daytona Blind Services (AQS ID: 12-127-5002). The SPM PM<sub>2.5</sub> FRM will be replaced with an SPM PM<sub>2.5</sub> continuous non-FEM at the Kooker Park site in Jacksonville (AQS ID: 12-031-0032). The monitor type and monitoring method are proposed to change at the Azalea Park site (AQS ID: 12-103-0018), where the SPM PM<sub>2.5</sub> continuous non-FEM will be replaced with a SLAMS PM<sub>2.5</sub> continuous FEM. These monitoring methods and monitor type changes are approved. All PM<sub>2.5</sub> collocation requirements found in 40 CFR Part 58, Appendix A, Section 3.2.5 will continue to be met after these discontinuations. Fifteen percent of each network of manual PM<sub>2.5</sub> methods (at least one site) must be collocated. The state of Florida's PM<sub>2.5</sub> monitoring network meets

the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-5 for all MSAs. The PM<sub>2.5</sub> monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

## PM<sub>2.5</sub> Near-road Monitoring Requirements 40 CFR Part 58, Appendix D, Section 4.7.1(b)(2)

Regulatory requirements in 40 CFR Part 58, Appendix D, 4.7.1(b)(2) require that "CBSAs with a population of 1,000,000 or more persons, at least one  $PM_{2.5}$  monitor is to be collocated at a near-road NO<sub>2</sub> station." The Network Plan indicates that the FDEP is operating  $PM_{2.5}$  monitors at the Munro Street near-road site (AQS ID: 12-057-0113) in the Tampa-St. Petersburg-Clearwater CBSA, the Fort Lauderdale near-road site (AQS ID: 12-011-0035) in the Miami-Fort Lauderdale-Miami Beach CBSA, and the Pepsi Place near-road site (AQS ID: 12-031-0108) in the Jacksonville CBSA.  $PM_{2.5}$  was also being monitored at the I-4 near-road site in the Orlando-Kissimmee-Sanford CBSA before the site was approved by the EPA for temporary discontinuation due to road construction in the immediate vicinity of the site. This site will resume operation as soon as construction activities in the area permit.

## PM<sub>2.5</sub> Continuous Monitoring Requirements 40 CFR Part 58, Appendix D, 4.7.2

Regulatory requirements for continuous PM<sub>2.5</sub> monitoring require that "…State, or where appropriate, local agencies must operate continuous PM<sub>2.5</sub> analyzers equal to at least one-half (round up) the minimum required sites listed in Table D–5 of this appendix. At least one required continuous analyzer in each MSA must be collocated with one of the required FRM/FEM/ARM [federal reference method/federal equivalent method/approved regional method] monitors, unless at least one of the required FRM/FEM/ARM monitor in which case no collocation requirement applies." These minimum continuous PM<sub>2.5</sub> monitoring requirements are met in all MSAs in the state. Also, the continuous PM<sub>2.5</sub> collocation requirements are met in all MSAs. Therefore, the continuous PM<sub>2.5</sub> monitoring network described in the Network Plan meets all design criteria of 40 CFR Part 58.

## PM<sub>2.5</sub> Background and Transport Sites 40 CFR Part 58, Appendix D, 4.7.3

Forty (40) CFR Part 58, Appendix D, 4.7.3 requires that "each state shall install and operate at least one PM<sub>2.5</sub> site to monitor for regional background and at least one PM<sub>2.5</sub> site to monitor for regional transport." The Network Plan identifies the Interagency Monitoring for Protected Visual Environments (IMPROVE) PM<sub>2.5</sub> sites at the St. Mark's National Wildlife Refuge (AQS ID: 12-129-0001) and the Everglades National Park (AQS ID: 12-086-0030) as background sites and the IMPROVE PM<sub>2.5</sub> site at the Chassahowitzka National Wildlife Refuge (AQS ID: 12-017-9000) as a transport site. Therefore, the Network Plan meets the requirements of 40 CFR Part 58 for background and transport sites.

# PM<sub>2.5</sub> Continuous Federal Equivalent Methods 40 CFR §58.10(e)

The EPA's regulations contain provisions for handling data collected using continuous  $PM_{2.5}$  FEMs. These procedures are found at 40 CFR §58.10(e). If an agency can demonstrate that the FEM data are not of sufficient comparability to a collocated FRM, then the monitoring agency may request that the FEM data not be used in comparison to the NAAQS. The EPA previously approved the  $PM_{2.5}$ continuous FEM at the Belle Glade site in Palm Beach County (AQS ID: 12-099-0008) for exclusion to comparisons to the  $PM_{2.5}$  NAAQS under 40 CFR §58.11(e), because the monitor did not meet the Class III  $PM_{2.5}$  FEM requirements in 40 CFR Part 53, Table C-4 when compared to collocated FRM data. All other  $PM_{2.5}$  FEM monitors operated in Florida are comparable to the  $PM_{2.5}$  NAAQS.

## PM<sub>2.5</sub> Chemical Speciation Network

Florida operates three  $PM_{2.5}$  Chemical Speciation Network (CSN) sites: at Tallahassee Community College (AQS ID: 12-073-0012), Sydney NCore in Tampa (AQS ID: 12-057-3002), and Daniela Banu NCore in Fort Lauderdale (AQS ID: 12-011-0034). The operation of these monitors is consistent with the CSN network assessment recently completed by the EPA.

## Photochemical Assessment Monitoring Stations (PAMS) 40 CFR Part 58, Appendix D, Section 5.0

With the promulgation of a new O<sub>3</sub> NAAQS on October 1, 2015, the EPA finalized changes to the PAMS requirements. By June 1, 2019, Florida will be required to implement PAMS monitoring at the Daniela Banu NCore site in Broward County (AQS ID: 12-011-0034) and at the Sydney NCore site in Hillsborough County (AQS ID: 12-057-3002). In Section 4.4 of the 2017 Network Plan, the FDEP submitted PAMS implementation plans for both sites. The Network Plan does not request any waivers of the PAMS monitoring requirements for either site. Both sites will begin operation as required by June 1, 2019. The Broward County and Hillsborough County local agencies will form a new PQAO for all of the required PAMS measurements. The EPA will work closely with Broward County and Hillsborough County to implement this new monitoring program, and will work with these agencies to ensure that a quality assurance project plan (QAPP) covering the PAMS measurements is in place and approved as required before these sites begin operation. The EPA is working to develop a national template for QAPPs and standard operating procedures (SOPs) for PAMS sites that may be used to meet this requirement. The PAMS network described in the Network Plan meets the requirements of 40 CFR Part 58.

## Monitoring Siting Criteria and Site Assessments 40 CFR Part 58, Appendix E

In reference to the Network Plan, 40 CFR Part 58.10(a)(1) states "[t]he plan shall include a statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E of this part, where applicable. The Regional Administrator may require additional information in support of this statement." The EPA interprets this reference to Appendix E, in conjunction with a December 17, 2015 Office of Inspector General report titled "EPA Can Strengthen Its Reviews of Small Particle Monitoring in Region 6 to Better Ensure Effectiveness of Air Monitoring Network" (hereafter referred to as "OIG Report"), to mean agencies should provide evidence in the annual network plan demonstrating that monitoring sites continue to meet siting requirements. The OIG Report determined that "[i]f the annual plan does not verify siting criteria, changed conditions at a site could go unnoticed until the next technical systems audit."

In Appendix B of the Network Plan, the FDEP provides a summary of the most recent annual site review conducted at each monitoring site, including the date of the review, whether any siting criteria requirements are not being met, and comments indicating any issues found and the status of corrective actions being taken. In addition to the information provided in the plan, the FDEP separately provided copies of the reports from the most recent annual siting criteria evaluation reports conducted for each site. The EPA appreciates the inclusion of this information in the Network Plan and the FDEP's continued efforts to ensure that its monitoring network meets siting criteria requirements.

Since the previous Network Plan, the FDEP has addressed siting criteria requirements that were not being met at several sites by either reconfiguring or relocating the sites, or requesting approval to discontinue the sites. The Network Plan identifies five sites that are not currently meeting one or more siting criteria requirements. At one site, Mandarin Road (AQS ID: 12-031-0098), the FDEP and Jacksonville have resolved the siting criteria issues since submitting the Network Plan. A summary of these siting sites is provided in Table 5.

Site Name	AQS ID	Pollutant(s)	Description	Status
Mandarin Rd.	12-031-0098	PM <sub>2.5</sub> FRM, Continuous PM <sub>2.5</sub>	Tree drip line is within 10 meters of the sample inlets	Per FDEP, the siting criteria issues have been resolved since submitting the network plan.
Davis Island	12-057-1035	O <sub>3</sub> , SO <sub>2</sub> , PM <sub>10</sub>	Tree drip line is 7.2 meters from the sampler inlet	EPA is working with FDEP, Hillsborough County, and the local property owner to reconfigure the site to meet requirements.
Baptist Children's Home	12-105-6006	O <sub>3</sub> , PM <sub>10,</sub> PM <sub>2.5</sub> FRM, Continuous PM <sub>2.5</sub>	Tree drip line is 5.8 meters (O <sub>3</sub> ) and 8.1 meters (PM <sub>2.5</sub> ) from the sampler inlet, and obstruction too high above inlet.	Siting criteria issues are being addressed by FDEP.
Osceola County Fire Station	12-097-2002	O <sub>3</sub>	Tree drip line is 6.5 meters from the sampler inlet, and obstruction too high above inlet.	EPA is working with FDEP and the local property owner to reconfigure the site to meet requirements.
Sikes Elementary School	12-105-6005	O <sub>3</sub> , SO <sub>2</sub>	Trees are too tall above the inlet, horizontal spacing from obstruction requirement not met.	FDEP is considering relocating the site.

The EPA appreciates the FDEP's continued efforts to ensure that siting criteria requirements are met throughout the network. The EPA requests that in its 2019 Network Plan, FDEP propose a plan to meet the above siting criteria requirements by either reconfiguring, relocating, or proposing to discontinue each of the above sites.

### **Meteorological Measurements**

The EPA recommends that in the 2019 Network Plan, FDEP include a list of which meteorological measurements are collected at each monitoring site required to collect meteorological measurements. This information could be included in the Network Description table in Appendix C, or in a separate section. At a minimum, the 2019 plan should list the required meteorological measurements at NCore and PAMS sites, to demonstrate that these minimum requirements are being met. PAMS meteorological measurements are not required to begin until June 1, 2019.

The required NCore meteorological measurements (wind speed, wind direction, relative humidity, and ambient temperature) are currently being collected at the Sydney Road (AQS ID: 12-057-3002) and St. Marks National Wildlife Refuge (AQS ID: 12-129-0001) NCore sites as required. The EPA understands that the meteorological equipment has been installed at the Daniela Banu NCore site in Broward County (AQS ID: 12-011-0034), but these measurements are currently not being collected due to limitations with the analog data loggers at the site. Broward County expects to begin reporting this data soon, once digital data logging is implemented at the site. The EPA requests that FDEP and Broward County notify the EPA as soon as the meteorological data collection begins.

Site Code	Site Name	Pollutant	Monitor Type	CBSA	Modification Description	EPA Action	Comments
12-011-0034	Daniela Banu NCore	PM10	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Method change: Replace manual sampler with continuous FEM	Approved	
12-011-0034	Daniela Banu NCore	PM2.5	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Change operating schedule from daily to 1-in-3	Approved	Meets minimum operating schedule under 58.12
12-011-0034	Daniela Banu NCore	PAMS	PAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Addition of PAMS measurements in 2019	Approved	
12-011-0082	Dr. Von D. Mizell-Eula Johnson State Park	Ozone	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Relocate on same property to meet siting criteria	Approved	Updated measurements in plan meet siting criteria
12-011-0082	Dr. Von D. Mizell-Eula Johnson State Park	NO2	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Relocate on same property to meet siting criteria	Approved	Updated measurements in plan meet siting criteria
12-011-2003	Pompano Highlands	Ozone	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Relocate on same property to meet siting criteria	Approved	
12-011-2003	Pompano Highlands	PM2.5	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Relocate on same property to meet siting criteria	Approved	Updated measurements in plan meet siting criteria
12-011-5005	Coconut Creek	PM10	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Method change: Replace manual sampler with continuous FEM	Approved	
12-011-5005	Coconut Creek	PM2.5	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Change operating schedule from daily to 1-in-3	Approved	Meets minimum operating schedule under 58.12
12-031-0032	Kooker Park	PM2.5	SPM	Jacksonville, FL	Method change: Replace manual sampler with continuous.	SPM change acknowledged	Replaced with non- FEM continuous.

## Appendix A: Summary of Proposed Network Modifications and EPA Approval or Disapproval

Site Code	Site Name	Pollutant	Monitor Type	CBSA	Modification Description	EPA Action	Comments
12-031-0080	Southside Playground	со	SPM	Jacksonville, FL	Discontinue	Discontinuation of SPM acknowledged	
12-031-0080	Southside Playground	SO <sub>2</sub>	SLAMS	Jacksonville, FL	Discontinue	Approved	Temporary approval granted 4/5/2018. Meets 58.14(c)(1)
12-031-0084	Rosselle	CO	SLAMS	Jacksonville, FL	Discontinue	Approved	Meets 58.14(c)(1)
12-031-0084	Rosselle	PM <sub>10</sub>	SLAMS	Jacksonville, FL	Discontinue and relocate to Pepsi Place Near Road site	Approved	
12-031-0097	Fort Caroline	SO <sub>2</sub>	SLAMS	Jacksonville, FL	Discontinue	Approved	Meets 58.14(c)(1)
12-031-0108	Pepsi Place Near Road	PM <sub>10</sub>	SLAMS	Jacksonville, FL	Addition - relocate from Rosselle site	Approved	
12-033-0004	Ellyson Industrial Park	Continuous PM <sub>2.5</sub>	SPM	Pensacola-Ferry Pass- Brent, FL	Discontinue	Approved	No minimum or continuous PM <sub>2.5</sub> requirement for CBSA, Continuous PM <sub>2.5</sub> still operating in the CBSA.
12-057-3002	Sydney NCore	PM <sub>2.5</sub>	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Change operating schedule from daily to 1-in-3	Approved	Meets minimum operating schedule under 58.12
12-057-3002	Sydney NCore	PAMS	PAMS	Tampa-St. Petersburg- Clearwater, FL	Addition of PAMS measurements in 2019	Approved	
12-071-0005	Winkler Pump Station	PM <sub>2.5</sub>	SLAMS	Cape Coral-Fort Myers, FL	Method change: Replace manual sampler with continuous FEM.	Approved	
12-071-0005	Winkler Pump Station	Continuous PM <sub>2.5</sub> Non- FEM	SPM	Cape Coral-Fort Myers, FL	Method change: Replace with continuous FEM.	Approved	
12-086-0019	Pennsuco	SO <sub>2</sub>	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Monitoring Objective change from Source to Population Exposure based on EPA Audit Recommendations.	Approved	

Site Code	Site Name	Pollutant	Monitor Type	CBSA	Modification Description	EPA Action	Comments
12-086-0034	Kendall	со	SPM	Miami-Fort Lauderdale- West Palm Beach, FL	Discontinue		Previously approved in 2017 network plan
12-086-0034	Kendall	Continuous PM <sub>2.5</sub> Non- FEM	SPM	A Miami-Fort Lauderdale- A West Palm Beach, Fl. Addition		Addition of SPM acknowledged	
12-086-1016	Miami Fire Station	PM <sub>10</sub>	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Method change: Replace manual sampler with continuous FEM	Approved	
12-086-1016	Miami Fire Station	PM <sub>2.5</sub>	SLAMS	Miami-Fort Lauderdale- West Palm Beach, FL	Method change: Replace manual FRM sampler and continuous non-FEM with continuous FEM. Collocated FRM will remain.	Approved	
12-103-0004	St. Petersburg College	Continuous PM <sub>2.5</sub> FEM	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Addition	Approved	
12-103-0018	Azalea Park	Continuous PM <sub>2.5</sub>	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Monitor type change from SPM to SLAMS and method change: Replace manual sampler with continuous FEM.	Approved	
12-103-0018	Azalea Park	PM10	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Method change: Replace manual sampler with continuous FEM	Approved	
12-103-1009	Sandy Lane	PM <sub>2.5</sub>	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Discontinue	Approved	Meets 58.14(c)(1)
12-103-3004	County Motorpool	PM <sub>10</sub> - Collocated QA Sampler	SLAMS	Tampa-St. Petersburg- Clearwater, FL	Discontinue	Approved	Collocation requirement still met.
12-105-6006	Baptist Childrens Home	PM <sub>2.5</sub>	SLAMS	Lakeland-Winter Haven, FL	Method change: Replace manual sampler with continuous FEM.	Approved	

Site Code	Site Name	Pollutant	Monitor Type	CBSA	Modification Description	EPA Action	Comments
12-105-6006	Baptist Childrens Home	Continuous PM <sub>2.5</sub> Non- FEM	SPM	Lakeland-Winter Haven, FL	Method change: Replace with continuous FEM.	Approved	
12-115-0013	Bee Ridge	PM <sub>2.5</sub>	SLAMS	North Port-Sarasota- Bradenton, FL	Method change: Replace manual sampler with continuous FEM.	Approved	
12-115-0013	Bee Ridge	Continuous PM <sub>2.5</sub> Non- FEM	SPM	North Port-Sarasota- Bradenton, FL	Method change: Replace with continuous FEM.	Approved	
12-117-1002	Sanford	Continuous PM <sub>2.5</sub>	SLAMS	Orlando-Kissimmee- Sanford, FL	Addition	Approved	
12-127-2001	Port Orange	Ozone	SLAMS	Deltona-Daytona Beach-Ormond Beach, FL	Discontinue	Approved	Temporary approval granted 4/5/2018. Doesn't meet 58.14(c), but lower than surrounding sites and minimum requirements still met
12-127-5002	Daytona - Blind Services	PM <sub>2.5</sub>	SLAMS	Deltona-Daytona Beach-Ormond Beach, FL	Method change: Replace manual sampler with continuous FEM.	Approved	
12-127-5002	Daytona - Blind Services	Continuous PM <sub>2.5</sub> Non- FEM	SPM	Deltona-Daytona Beach-Ormond Beach, FL	Method change: Replace with continuous FEM.	Approved	

# **Florida Department of Environmental Protection**

# 2018 Annual Air Monitoring Network Plan Addendum

# Division of Air Resource Management Office of Air Monitoring December 2018

Florida Department of Environmental Protection Division of Air Resource Management 2600 Blair Stone Road Tallahassee, Florida 32399-2400 www.floidadep.gov



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## **1.0 Introduction**

This addendum provides information to the USEPA to approve the relocation or closure of the sites and monitors listed in Table 1.1, below.

AQS Site #	Site Name	Туре	Pollutant	Modification	
12-057-3002	Sydney	SLAMS	PM <sub>10</sub> (Primary and collocated monitors)	Close	
12-103-2008	Gateway	SLAMS	СО	Close	
12-031-0108	Pepsi Place	SLAMS	$PM_{10}$	Relocation to Mandarin site	
12 000 0007	Melbourne	SLAMS	Ozone, PM <sub>2.5</sub> , PM <sub>10</sub>	Palacetian on property	
12-009-0007	webburne	SPM	Continuous PM <sub>2.5</sub>	Relocation on property	

Table 1.1 Site and Monitor Closures and Relocations

### 2.0 Monitor Closures

The Sydney and Gateway monitors mentioned in Table 1.1, meet several scenarios defined in EPA's Network Assessment Guidance and 40 CFR 58.14(c), where the state or local agency can confidently request approval for the shutdown of a SLAMS monitor. These include:

- The monitors showed attainment during the last five years;
- The probability is less than 10% that these monitors will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past;
- The monitors are not specifically required by an attainment plan or maintenance plan, as it is an attainment area which is expected to remain in attainment; and
- The monitors have not measured violations of the CO or  $NO_2$  NAAQS in the last five years.

A summary of the evaluation DEP performed for these monitors using EPA's Ambient Air Monitoring Network Assessment Guidance (AAMNAG) document is provided below in Tables 2.1 and 2.2.

#### Florida Department of Environmental Protection 2018 Network Plan Addendum

#### Table 2.1 Monitor Evaluation Summaries for Discontinuation

AQS Site #	Site Name	Туре	Pollutant	Showed Attainment 2013-2017	Probability <10% Monitor Will Exceed 80% of NAAQS	Monitor Specifically Required by Attainment or Maintenance Plan	Last Monitor in Nonattainment or Maintenance Area	CFR Required	Modification	Comments
		SLAMS	$PM_{10}$	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 2.2
12-057-3002	Sydney	SLAMS	$PM_{10}$	Yes	Yes	No	No	No	CLOSE	Collocated monitor. See calculation results in Table 2.2
12-103-2008	Gateway	SLAMS	СО	Yes	Yes	No	No	No	CLOSE	See calculation results in Table 2.2

Note: Section 4.1 of the AAMNAG states that a monitor can be removed (after Regional Administrator approval) if it is currently in attainment with the applicable NAAQS standard and if the following four tests can be met:

1. The PM<sub>2.5</sub>, ozone, CO, PM<sub>10</sub>, SO<sub>2</sub>, lead, or NO<sub>2</sub> monitor showed attainment during the previous five years.

2. The probability is less than 10% that the monitor will exceed 80% of the applicable NAAQS during the next three years based on the concentrations, trends, and variability observed in the past. This can be done using the following equation:

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

 $\overline{X}$  is the average design value for the last 5 years

t is the student's t value for n-1 degrees of freedom at the 90% confidence level

s is the standard deviation of the design values

n is the number of records (i.e., number of design values), and

NAAQS is the standard of interest.

3. The monitor is not specifically required by an attainment plan or maintenance plan.

4. The monitor is not the last monitor in a nonattainment area or maintenance area that contains a contingency measure triggered by an air quality concentration in the latest attainment or maintenance plan adopted by the state and approved by EPA.

All monitors listed in Table 2.1 passed these tests and the probability test results are listed in Table 2.2 below.

Site	Site Name	Pollutant	Averaging Period	Design Value					_					80% of	90%	
				2013	2014	2015	2016	2017	X	S	t	n	NAAQS	NAAQS	Confidence Interval	Pass
12-057-3002	Sydney	$PM_{10}^{1}$	24-hr	23	34	42	22	36	33.80	8.29	2.13	5	150	120	41.70	Yes
		PM <sub>10</sub> <sup>1</sup> Collocated	24-hr	24	29	29	21	31	33.80	8.29	2.13	5	150	120	41.70	Yes
12-103-2008	Gateway	CO <sup>1</sup>	8-hr	0.9	1	0.6	0.7	0.8	1.32	0.50	2.13	5	9	7.2	1.79	Yes
			1-hr	1.6	3	1.8	1.5	1.2	2.08	0.85	2.13	5	35	28	2.89	Yes

<sup>1</sup> The 1<sup>st</sup> highest concentration for each year was used in probability calculation.

## 3.0 Site and Monitor Relocations

### <u>City of Jacksonville – Pepsi Place Site: PM<sub>10</sub> Monitor</u>

DEP is requesting approval to relocate the  $PM_{10}$  monitor located at the Pepsi Place Site (AQS Site #: 12-031-0108) in Jacksonville to the Mandarin Road Site (AQS Site #: 12-031-0098) as it will allow for a more efficient use of resources while ensuring that the  $PM_{10}$  monitoring requirements continue to be met for the Metropolitan Statistical Area (MSA). Currently, the Mandarin Road site has a manual and continuous  $PM_{2.5}$  monitor, which could be replaced with a single monitor (Teledyne T-640X), once the  $PM_{10}$  monitor is relocated to that site. The site review information for Mandarin is presented in Table 3.1, below.

	Mandarin Road Site					
AQS Site #	12-031-0098					
City (CBSA)	Jacksonville					
Site Name	Mandarin Road Site					
Statement of Purpose	Needed by Regulation					
Site Review Date	1/24/2018					
County	Duval					
Location Latitude	30.135874 N					
Location Longitude	-81.634093 W					
Address	14932 Mandarin Road					
Objective	Population Exposure					
Pollutants Monitored	PM <sub>2.5</sub> and Continuous PM <sub>2.5</sub>					
Sampling and Analysis Method	PM <sub>2.5:</sub> TEI 2025i and TEOM 1405, Gravimetric Analysis					
Spatial Scale	Neighborhood					
Operating Schedule	Continuous and 1-in-3-day					
Network Type	PM <sub>2.5</sub> : SLAMS; Continuous PM <sub>2.5</sub> : SPM					
Distance from Inlet to nearest:	Tree Dripline = $PM_{2.5}$ : 11.0 meters, Continuous $PM_{2.5}$ : 11.9 meters Road = $PM_{2.5}$ and Continuous $PM_{2.5}$ : 82 meters Wall = NA					
Access	Unlimited					
Owner of Land	City of Jacksonville					
Other Monitored Parameters	NA					
Inlet Height	PM <sub>2.5</sub> : 2.6 meters, Continuous PM <sub>2.5</sub> : 4.5 meters					
Comments	$PM_{10}$ monitor will be added by January 31, 2019.					

Table 3.1 Mandarin Road - AQS Site # 12-031-0098

### Brevard County – Melbourne Site

DEP is requesting approval to relocate the Melbourne Site (AQS Site #: 12-009-0007) in Brevard County due to the site's temporary transformer not meeting the City's electrical code. The new shelter will be located on the same property, approximately 108 meters from the current location where a permanent transformer has been established. The site review information is presented in Table 3.2 and Figures 3.1 to 3.5, below.

	Melbourne Site					
AQS Site #	12-009-0007					
City (CBSA)	Melbourne (Palm Bay-Melbourne-Titusville)					
Site Name	Melbourne					
Statement of Purpose	Needed by Regulation					
Site Review Date	02/05/2018					
County	Brevard					
Location Latitude	28.053695 N					
Location Longitude	-80.628514 W					
Address	410 W. Florida Avenue					
Objective	Population Exposure (O <sub>3</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> ), Highest Concentration (PM <sub>2.5</sub> )					
Pollutants Monitored	Ozone, PM <sub>2.5</sub> , PM <sub>10</sub>					
Sampling and Analysis Method	Ozone: Thermo 49i, UV Photometry; PM <sub>2.5</sub> : TEI 2025, Continuous PM <sub>2.5</sub> : Thermo 1400AB, Gravimetric Analysis; PM <sub>10</sub> : Thermo 1400AB, Gravimetric Analysis					
Spatial Scale	Neighborhood					
Operating Schedule	Continuous (O <sub>3</sub> , PM <sub>2.5</sub> and PM <sub>10</sub> ) and 1-in-3-day (PM <sub>2.5</sub> )					
Network Type	Ozone: SLAMS; PM <sub>2.5</sub> : SLAMS; Continuous PM <sub>2.5</sub> : SPM; PM <sub>10</sub> : SLAMS					
Distance from Inlet to nearest:	Tree Dripline = $O_3$ : 49 meters, $PM_{2.5}$ : 50 meters; Continuous $PM_{2.5}$ : 52 meters; $PM_{10}$ : 46 meters. Road = $O_3$ : 75 meters, $PM_{2.5}$ : 70 meters; Continuous $PM_{2.5}$ : 73 meters; $PM_{10}$ : 77 meters. Wall = NA					
Access	Unlimited					
Owner of Land	City of Melbourne					
Other Monitored Parameters	NA					
Inlet Height	O <sub>3</sub> : 3.8 meters, PM <sub>2.5</sub> : 2.35 meters; Continuous PM <sub>2.5</sub> : 4.55; PM <sub>10</sub> : 4.5 meters					
Comments	The estimated coordinates and measurements for the new shelter and monitors are: 28.05361111 N, -80.62972222W; Tree Dripline = 15 meters; Road = 40 meters; Wall = NA. Site relocation expected by April 1, 2019.					

#### Table 3.2 Melbourne - AQS Site # 12-009-0007

> Photos and Aerial for the Brevard County: Melbourne Site - AQS # 12-009-0007

Figure 3.1 North from Proposed Melbourne Site



Figure 3.2 East from Proposed Melbourne Site



Figure 3.3 West from Proposed Melbourne Site



Figure 3.4 South from Proposed Melbourne Site



Figure 3.5 Aerial of Original and Proposed Melbourne Site Locations





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

# MAR D 1 2019

Mr. Jeff Koerner Director Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Dear Mr. Koerner:

On January 24, 2019, the Florida Department of Environmental Protection (FDEP) submitted to the U.S. Environmental Protection Agency an addendum to the state of Florida's 2018 Annual Ambient Air Monitoring Network Plan (Network Plan). The addendum to the Network Plan (Addendum) proposes to discontinue and relocate air monitors. The air monitoring regulations found at 40 CFR §58.10(a)(1) require that the Network Plan Addendum be made available for public inspection and comment for at least 30 days before submission to the EPA for approval. The Addendum was made available for public inspection and comment on the FDEP website from December 18, 2018 to January 18, 2019, and no comments were received.

The Addendum proposes to discontinue operation of two State or Local Air Monitoring Stations (SLAMS): the primary and collocated monitors measuring particulate matter less than ten micrometers (PM<sub>10</sub>) at the Sydney NCore site in Hillsborough County (AQS ID: 12-057-3002), and the carbon monoxide (CO) monitor at the Gateway site in Pinellas County (AQS ID: 12-103-2008). Both SLAMS monitors meet the requirements of 40 CFR §58.14(c)(1) for discontinuation. The monitors have shown attainment with the applicable National Ambient Air Quality Standards (NAAQS) during the previous five years. In addition, there is a probability of less than 10 percent that these monitors would exceed 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past. The monitors are not specifically required by an attainment plan or maintenance plan and the requirements in 40 CFR Part 58, Appendix D will continue to be met after these discontinuations. Both SLAMS monitors are approved for discontinuation.

The Addendum also proposes to relocate several SLAMS monitors. First, the FDEP proposes to relocate the  $PM_{10}$  monitor at the Pepsi Place Near-Road site (AQS ID: 12-031-0108) in Jacksonville (Duval County) to the Mandarin Road site (AQS ID: 12-031-0098). This will allow for a more efficient use of resources, as the Teledyne T-640X monitor that will be installed at the Mandarin Road site measures  $PM_{10}$  and  $PM_{2.5}$  and will replace the existing manual and continuous non-Federal Equivalent Method  $PM_{2.5}$  monitors at the site.

The FDEP also proposes to relocate the Melbourne site (AQS ID: 12-009-0007) in Brevard County to a nearby location on the same property to meet the city electrical code. The EPA understands based on further discussions with FDEP that the site has recently been temporarily shut down due to safety concerns, as the roof to the monitoring shelter was damaged and leaking. The FDEP is working to

replace the shelter and resume monitoring at the site. Please notify the EPA once the site resumes operation.

For each of these proposed relocations in the Addendum, the FDEP provided all the information required by 40 CFR §58.10(b) and provided evidence that the new monitoring site locations meet siting criteria requirements found in 40 CFR Part 58, Appendix E. Each of these monitor relocations are approved. For each relocated monitor, the EPA approves the use of a combined dataset from the previous location and the new location for calculating design values.

Thank you for working with the EPA to monitor air pollution and promote clean air in Florida. If you have any questions or concerns about this approval, please contact Gregg Worley at (404) 562-9141 or Daniel Garver at (404) 562-9839.

Sincerely,

Carol S. Kemker

Carol L. Kemker Acting Director Air, Pesticides and Toxics Management Division

cc: Ms. Sandra Veazey Administrator, Office of Air Monitoring