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

NOV 07 2014

Ms. Paula Cobb
Director
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Ms. Cobb:

Thank you for submitting the state of Florida's 2014 annual ambient air monitoring network plan (Network Plan) dated May 2014. The Network Plan is required by 40 Code of Federal Regulations (CFR) § 58.10. The Network Plan 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 FDEP provided the public a 30-day review period and received no comments. According to 40 CFR § 58.10(a)(2), since public inspection and comments have already been solicited, the EPA is not required to offer another comment period.

The EPA approves the state's 2014 Network Plan with the exception of three proposed monitoring sites. The state will need to provide additional information on two proposed near-road monitoring sites, and one proposed source-oriented SO_2 site as described in the enclosure. Once the EPA Region 4 is in agreement with the proposed locations for these sites, the state will need to make that information available for public inspection. Upon completion of the public inspection process, an addendum to the Network Plan must be submitted to the EPA Region 4 for approval.

We have enclosed our analysis of your Network Plan and details of our review. 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,

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

Enclosures (2)

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

Mr. H. Patrick Wong
Chief, Miami-Dade County Air Quality Management Division

John Shellhorn
Chief, Environmental Quality Division, City of Jacksonville

Mr. Jerry Campbell, PE
Director, Hillsborough County Environmental Protection Commission, Air Management Division

Mr. Peter A. Hessling
Director, Pinellas County Air Quality Division

Mr. James E. Stormer
Administrator, Palm Beach County Division of Environmental Health and Engineering Services, Air Pollution Control Section

Mr. David Jones
Acting Director, Orange County Environmental Protection Division Air Pollution Control Program

Mr. Ray Smith
Director, Collier County Pollution Control & Prevention Department

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

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

2014 State of Florida Ambient Air Monitoring Network Plan
U.S. EPA Region 4 Comments and Recommendations

This document contains the U.S. EPA Region 4 comments and recommendations on the state of Florida's 2014 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_3), particulate matter less than 2.5 microns ($PM_{2.5}$), particulate matter less than 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), 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, 2013, population estimates from the U.S. Census Bureau, and historical ambient air monitoring data. Minimum monitoring requirements for O_3, $PM_{2.5}$, PM_{10}, 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, 2013, population estimates from the U.S. Census Bureau are shown in Table 1.

Table 1: Core Based Statistical Areas and July 1, 2013 Population Estimates

CBSA Name	CBSA Type	Population
Miami-Fort Lauderdale-West Palm Beach, FL	Metropolitan Statistical Area	5,564,635
Tampa-St. Petersburg-Clearwater, FL	Metropolitan Statistical Area	2,783,243
Orlando-Kissimmee-Sanford, FL	Metropolitan Statistical Area	2,134,411
Jacksonville, FL	Metropolitan Statistical Area	1,345,596
North Port-Sarasota-Bradenton, FL	Metropolitan Statistical Area	702,281
Cape Coral-Fort Myers, FL	Metropolitan Statistical Area	618,754
Lakeland-Winter Haven, FL	Metropolitan Statistical Area	602,095
Deltona-Daytona Beach-Ormond Beach, FL	Metropolitan Statistical Area	590,289
Palm Bay-Melbourne-Titusville, FL	Metropolitan Statistical Area	543,376
Pensacola-Ferry Pass-Brent, FL	Metropolitan Statistical Area	448,991
Port St. Lucie, FL	Metropolitan Statistical Area	424,107
Tallahassee, FL	Metropolitan Statistical Area	367,413
Naples-Immokalee-Marco Island, FL	Metropolitan Statistical Area	321,520
Ocala, FL	Metropolitan Statistical Area	331,298
Gainesville, FL	Metropolitan Statistical Area	264,275
Crestview-Fort Walton Beach-Destin, FL	Metropolitan Statistical Area	235,865
Panama City, FL	Metropolitan Statistical Area	184,715
Punta Gorda, FL	Metropolitan Statistical Area	159,978
Sebastian-Vero Beach, FL	Metropolitan Statistical Area	138,028
Homosassa Springs, FL	Metropolitan Statistical Area	141,236
The Villages, FL	Metropolitan Statistical Area	93,420
Sebring, FL	Metropolitan Statistical Area	98,786
Key West, FL	Micropolitan Statistical Area	73,090
Palatka, FL	Micropolitan Statistical Area	74,364
Lake City, FL	Micropolitan Statistical Area	67,531
Okeechobee, FL	Micropolitan Statistical Area	39,996
Clewiston, FL	Micropolitan Statistical Area	39,140

Arcadia, FL	Micropolitan Statistical Area	34,862
Wauchula, FL	Micropolitan Statistical Area	27,731

O_3 Monitoring Requirements
40 CFR Part 58, Appendix D, Table D-2

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 of the design criteria of 40 CFR Part 58.

SO_2 Monitoring Requirements
40 CFR Part 58, Appendix D, 4.4

Ambient air monitoring network design criteria for SO_2 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_2 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_2 monitor at an NCore station may satisfy minimum monitoring requirements if that monitor is located within a CBSA with required monitors under Appendix D, 4.4.

FDEP is proposing a new site in the Homosassa Springs CBSA to meet the PWEI requirement (AQS ID: 12-017-0006). However, the Network Plan does not include all of the required information about this site for approval. FDEP will need to submit an addendum to the Network Plan that contains a full proposal for this site. The addendum must include all of the required information for proposed sites under 40 CFR §58.10(b). The addendum should also include supporting information about how the site location was selected, such as site photos, maps, wind roses, and information about the target source. The addendum should be made available for public inspection under 40 CFR § 58.10(a)(1), and then submitted to the EPA Region 4 for approval.

All other applicable CBSAs in Florida are now meeting the requirements for SO_2 PWEI monitoring.

NO_2 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_2 monitoring sites are found in section 4.3.2 of Appendix D to 40 CFR Part 58. The requirements for near-road monitoring are currently met for the Tampa-St. Petersburg-Clearwater and Jacksonville CBSAs. The Network Plan also includes near-road sites in the Miami-Fort Lauderdale-West Palm Beach (in Broward County) and Orlando-Kissimmee-Sanford CBSAs, which will meet the requirements for near-road monitoring in the respective CBSAs once the sties begin operation.

Second near-road monitoring sites are required to begin operation on January 1, 2015 in the Miami-Fort Lauderdale-West Palm Beach and Tampa-St. Petersburg-Clearwater CBSAs. New sites in Miami-Dade

County and Pinellas County are being established to meet these requirements, but the exact locations of these sites have not been finalized. Once the details of these sites are finalized, the state will need to submit an addendum to the Network Plan containing these site proposals. The addendum must include all of the required information for proposed sites under 40 CFR §58.10(b), and should also include additional information about the proposed near-road monitoring sites. Section 13.5 of the near-road NO_2 Technical Assistance Document (TAD)[1] and Table 13.1 of the TAD discuss important site and road parameters when evaluating a near-road site. Using the TAD as a reference, additional information provided on near-road NO_2 monitoring should include, at minimum, the following information for each site:

- Proposed AQS ID
- Street address and site geographical coordinates (longitude and latitude)
- Target road segment description including type of road
- Site pictures facing 4-8 directions – N, S, E, W, NE, NW, SE, SW
- Probable distance between the inlet probe and the outside nearest edge of the target road
- Probable probe height of the inlet probe from ground level
- Site property description including property owner and feasibility of site access
- Roadway design and configuration
- Presence of any roadside structures
- Nearest wind rose representative of the site and orientation of the site with respect to the predominate wind direction
- Traffic data and ranking information (see Table 6-3 of the Technical Assistance Document), as well as the source and vintage of the data
- Sampling and analysis method(s) for each measured parameter
- Operating schedules for each monitor at the site
- Monitoring objective and spatial scale of representativeness for each monitor at the site.
- MSA, CBSA, CSA or other area represented by the monitor
- Discussion of other siting criteria

Once the EPA Region 4 is in agreement with the proposed near-road sites, the state will need to make the information available for public inspection. Upon completion of the public inspection process, the Network Plan addendum must be submitted to the EPA Region 4 for approval. We will continue to work with your agency as needed to facilitate the establishment of these sites as expeditiously as possible.

Section 4.3.2 of Appendix D to 40 CFR Part 58 also requires CBSAs with populations between 500,000 and 1,000,000 people to operate a near-road NO_2 monitor starting in January 1, 2017. Florida has five CBSAs with populations in this range: North Port-Sarasota-Bradenton, Cape Coral-Fort Myers, Lakeland-Winter Haven, Deltona-Daytona Beach-Ormond Beach, and Palm Bay-Melbourne-Titusville. As a result of the 5-year National Ambient Air Quality Standards (NAAQS) review cycle, the NO_2 monitoring requirements may be modified in 2016. The NO_2 near-road monitoring requirements may change for CBSA's with a populations between 500,000 and 1,000,000 people, such as the FL CBSAs listed above. Ambient air monitoring network design criteria for area-wide NO_2 sites are found in section 4.3.3 of Appendix D to 40 CFR Part 58. The area-wide NO_2 monitoring network described in the Network Plan meets the requirements of Section 4.3.3 in all areas. These sites are summarized in Table 2.

[1] Near-road NO2 Monitoring Technical Assistance Document. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. EPA-454/B-12-002. June 2012. http://www.epa.gov/ttnamti1/files/nearroad/NearRoadTAD.pdf.

Table 2: Area-wide NO_2 Monitoring Sites

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

Ambient air monitoring network design criteria for Regional Administrator required NO_2 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 forty additional NO_2 monitoring stations nationwide, with a primary focus on siting these monitors in locations to protect susceptible and vulnerable populations. The EPA has 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 to protect susceptible and vulnerable populations. The full list of NO_2 monitors identified by the Regional Administrators can be found on the EPA's website at http://www.epa.gov/ttnamti1/svpop.html.

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

Beginning January 1, 2015, CO monitoring will be required at a near-road monitoring site in CBSAs with populations greater than 2,500,000. CO monitoring will be required at a near-road monitoring site in CBSAs with populations greater than 1,000,000 beginning on January 1, 2017. The Network Plan indicates that CO monitoring is ongoing at the Hillsborough County near-road site in the Tampa-St. Petersburg-Clearwater CBSA, and will begin at the Broward County near-road site in the Miami-Fort Lauderdale-Miami Beach CBSA by January 1, 2015. Therefore, the CO monitoring network described in the Network Plan meets all of the design criteria of 40 CFR Part 58.

PM_{10} Monitoring Requirements
40 CFR Part 58, Appendix A, 3.3.1
40 CFR Part 58, Appendix D, Section 4.6 and Table D-4

The state of Florida's current 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 currently 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 primary quality assurance organization (PQAO) level. The FDEP and all of its local agencies operate under a single PQAO. The PM_{10} monitoring network described in the Network Plan meets all of the design criteria of 40 CFR Part 58.

$PM_{2.5}$ Monitoring Requirements
40 CFR Part 58, Appendix A, 3.2.5
40 CFR Part 58, Appendix D, Section 4.7 and Table D-5

The state of Florida's current $PM_{2.5}$ monitoring network meets the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-5 for all MSAs. Also, all $PM_{2.5}$ collocation requirements found in 40

CFR Part 58, Appendix A, Section 3.2.5 are currently being met. Fifteen percent of each network of manual $PM_{2.5}$ methods (at least one site) must be collocated. Beginning January 1, 2015, $PM_{2.5}$ monitoring will be required at a near-road monitoring site in CBSAs with populations greater than 2,500,000. $PM_{2.5}$ monitoring will be required at a near-road monitoring site in CBSAs with populations greater than 1,000,000 beginning on January 1, 2017. The Network Plan indicates that $PM_{2.5}$ monitoring is ongoing at the Hillsborough County near-road site in the Tampa-St. Petersburg-Clearwater CBSA, and will begin at the Broward County near-road site in the Miami-Fort Lauderdale-Miami Beach CBSA by January 1, 2015. The $PM_{2.5}$ monitoring network described in the Network Plan meets all of the design criteria of 40 CFR Part 58.

$PM_{2.5}$ Continuous Monitoring Requirements
40 CFR Part 58, Appendix D, 4.7.2

Regulatory requirements for continuous $PM_{2.5}$ monitoring require that "…State, or where appropriate, local agencies must operate continuous $PM_{2.5}$ 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 monitors is itself a continuous FEM or ARM monitor in which case no collocation requirement applies." These minimum continuous $PM_{2.5}$ monitoring requirements are currently met in the all of the MSAs in the state. Also, the continuous $PM_{2.5}$ collocation requirements are currently met in all MSAs. Therefore, the continuous $PM_{2.5}$ monitoring network described in the Network Plan meets all of the design criteria of 40 CFR Part 58.

$PM_{2.5}$ Background and Transport Sites
40 CFR Part 58, Appendix D, 4.7.3

40 CFR Part 58, Appendix D, 4.7.3 requires that "each state shall install and operate at least one $PM_{2.5}$ site to monitor for regional background and at least one $PM_{2.5}$ site to monitor for regional transport." The Network Plan identifies the Interagency Monitoring for Protected Visual Environments (IMPROVE) $PM_{2.5}$ 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 $PM_{2.5}$ site at the Chassahowitzka National Wildlife Refuge (AQS ID: 12-017-9000) as a transport site. Therefore, FDEP has satisfied the requirements of 40 CFR Part 58 for background and transport sites.

$PM_{2.5}$ Continuous Federal Equivalent Methods
40 CFR § 58.10(e)

As part of the recent revisions to the $PM_{2.5}$ NAAQS, the EPA created new procedures 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. In the Network Plan, FDEP has not requested that any of its $PM_{2.5}$ FEMs be excluded from comparisons to the NAAQS.

$PM_{2.5}$ Chemical Speciation Network

The EPA has been conducting an assessment of the $PM_{2.5}$ Chemical Speciation Network (CSN) in an effort to optimize the network and create a network that is sustainable going forward. As a result of this assessment, the EPA is defunding a number of monitoring sites, eliminating the CSN $PM_{2.5}$ mass measurement, reducing the frequency of carbon blanks, reducing sample frequency at some monitoring sites, and reducing the number of icepacks in shipment during the cooler months of the year. As FDEP discusses in the Network Plan, the EPA is planning to defund the Skyview site (AQS ID: 12-103-0026). The state of Florida will be also be affected at all funded CSN sites by the elimination of the $PM_{2.5}$ mass measurement, the reduction of carbon blank frequency, and the reduction in icepacks. The CSN $PM_{2.5}$ mass measurement is recommended for elimination in October 2014 and all other changes are recommended to take place in January 2015. Final changes to the CSN in the state of Florida should be reflected in the 2015 Network Plan.

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

40 CFR Part 58, Appendix D, 4.5 requires that "At a minimum, there must be one source-oriented SLAMS [state and local air monitoring station] 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, which is the only non-airport source in the state that emits over 0.50 tons per year (tpy).

40 CFR Part 58, Appendix D, 3(b) requires that "NCore sites in CBSA with a population of 500,000 people (as determined in the latest Census) or greater shall also measure Pb either as Pb-TSP or Pb-PM_{10}." The Network Plan indicates that Pb-PM_{10} sampling is ongoing at the Tampa NCore site (AQS ID: 12-057-3002) and will begin at the Broward County NCore site (AQS ID: 12-011-0034) when the site begins operation later this year. The Pb monitoring network described in the Network Plan meets all of the design criteria of 40 CFR Part 58.

Operating Schedules
40 CFR § 58.12
The monitoring network proposed in the Network Plan meets the required operating schedules for all continuous analyzers and all manual Pb, PM_{10}, $PM_{2.5}$, and $PM_{2.5}$ Speciation Trends Network (STN) monitors. FDEP has not proposed any changes to its operating schedules in the 2014 Network Plan.

Air Quality Index (AQI) Reporting
40 CFR § 58.50

AQI reporting is required in MSAs with populations over 350,000. There are 12 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, Palm Bay-Melbourne-Titusville, Pensacola-Ferry Pass-Brent, Port St. Lucie, and Tallahassee. The Network Plan includes a link on Page 7 to the FDEP website where this information is available. This satisfies the AQI reporting requirements.

National Core (NCore) Monitoring Network

FDEP has designated three NCore sites: Sydney Road in Tampa (AQS ID: 12-057-3002), Pine Island Road in Broward County (AQS ID: 12-011-0034), and St. Mark's National Wildlife Refuge (AQS ID: 12-129-0001). These sites satisfy the requirements for NCore monitoring and have been approved by the EPA's Office of Air Quality Planning and Standards. The St. Mark's NCore site was established in 2014 as a rural NCore site. A memo approving the St. Marks's site from the EPA's Office of Air Quality Planning and Standards is enclosed.

Proposed Monitoring Network Changes

In the Network Plan, FDEP has proposed to relocate the monitors at the University of Florida Agricultural Research Center site in Broward County (AQS ID: 12-099-0020) to the nearby NCore site when it begins operation. The EPA approves this relocation of the PM_{10}, $PM_{2.5}$ FRM, continuous $PM_{2.5}$, $PM_{2.5}$ speciation, and air toxics measurements to the NCore site.

FDEP has also proposed new special purpose monitoring sites, which are summarized in Table 3.

Table 3: Newly Proposed Special Purpose Monitors

CBSA Name	County	Site Name	Parameters
Tampa-St. Petersburg-Clearwater	Hillsborough	Apollo Beach	SO_2, $PM_{2.5}$
Tampa-St. Petersburg-Clearwater	Hillsborough	N/A	Pb
Jacksonville	Duval	N/A	Pb

Request for Waiver of Siting Criteria

In a separate letter to the EPA Region 4 dated September 17, 2014, Orange County, Florida requested a temporary waiver of siting criteria for its new near-road site under 40 CFR Part 58, Appendix E, Section 10. Due to a long-term construction project along the Interstate 4 corridor in Orlando, the Florida Department of Transportation (FDOT) has requested that the near-road monitoring shelter be placed further from the road than originally planned. The I-4 construction will begin in early 2015, and will last for approximately six years.

40 CFR Part 58 Appendix E Section 6.4(a) requires that near-road NO_2 monitoring probes "shall be as near as practicable to the outside nearest edge of the traffic lanes of the target road segment; but shall not be located at a distance greater than 50 meters, in the horizontal, from the outside nearest edge of the traffic lanes of the target road segment." In order to comply with requests from FDOT, Orange County is proposing to install the site in a temporary location, approximately 60-70 meters from the nearest traffic lane, and is requesting a temporary waiver of the above siting criteria requirement. This site was originally approved by the EPA Region 4 as part of the 2013 Network Plan, but has not yet been installed.

Under 40 CFR Part 58, Appendix E, Section 10, waivers of siting criteria for new sites can be granted only if both of the following criteria are met:

> 10.1.1 The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met.

10.1.2 The monitor or probe cannot reasonably be located so as to meet the siting criteria because of physical constraints (e.g., inability to locate the required type of site the necessary distance from roadways or obstructions).

While this distance from the roadway is not ideal, the EPA agrees that the temporary site will still be reasonably representative of the near-road environment. The EPA also agrees that due to the extensive nature of the construction project, which will affect almost all of the highest traffic count road segments in the CBSA, the probe cannot not reasonably be located within the required 50 meters of the nearest traffic lane at this time.

Orange County has negotiated an agreement that upon the completion of the road construction, the FDOT construction contractor will be required to relocate the site to the originally approved location, which will be approximately 10-15 meters from the nearest traffic lane of the reconstructed roadway.

Based on the above information, the EPA grants a temporary waiver of the distance to the roadway requirement for this site. Orange County has also requested a temporary change to the meteorological methodology used at the site due to an overhead bridge at the temporary location, and the EPA approves this request as well. Upon completion of the I-4 construction, these waivers will expire and the site must be relocated to meet the requirements of Section 6.4(a).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAY 13 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Ms. Sandra F. Veazey, Chief
Bureau of Air Monitoring and Mobile Sources
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Ms. Veazey:

This letter transmits our approval of the Florida Department of Environmental Protection's Division of Air Resource Management proposed NCore station at the St. Marks National Wildlife Refuge site, AQS# 12-129-0001, as required by the Ambient Air Monitoring Regulations. According to these rules (see 40 CFR 58.11(c)), NCore network design and changes must be approved by the Environmental Protection Agency's (EPA) Administrator. This authority has been delegated to the Director of the Air Quality Assessment Division in EPA's Office of Air Quality Planning and Standards.

In considering your proposed NCore monitoring station, we worked with your Regional Office on a review of your annual monitoring network plan and an assessment of the proposed location and characteristics of the area to be monitored. After careful consideration of your proposal, we are pleased to approve this station as part of the NCore network.

By EPA's rules (see 40 CFR 58.13), an approved NCore station is expected to be operating with all required measurements by January 1, 2011. Enclosure A provides an update on required measurements and Enclosure B provides EPA's Air Quality System instructions on coding for NCore monitors and data. Please share this information with your staff responsible for the NCore station measurements and data submission.

Thank you for your program's efforts in developing the NCore station plan and establishing the site. For questions, you may contact Tim Hanley at hanley.tim@epa.gov and 919-541-4417, or David Shelow at shelow.david@epa.gov and 919-541-3776.

Sincerely,

Richard A. Wayland

Richard A. Wayland
Director
Air Quality Assessment Division

2 Enclosures

cc: Dick Arbes – Florida Department of Environmental Protection
Douglas Neeley – EPA Region 4

Enclosure A
Update on Measurements at NCore Stations

The majority of required measurements at NCore stations are either well established or recently improved methods for particles, gases, and meteorology. With minor exceptions, monitoring agencies have identified all of the $PM_{2.5}$, gas, and meteorological measurements necessary for successful operation of their NCore station. However, $PM_{10\text{-}2.5}$ mass methods have only recently become available and $PM_{10\text{-}2.5}$ speciation methods are not fully developed. This enclosure summarizes our current position on available methods for operation of $PM_{10\text{-}2.5}$ mass and deployment of methods for $PM_{10\text{-}2.5}$ speciation.

Measurement of $PM_{10\text{-}2.5}$ Mass

Measurement of $PM_{10\text{-}2.5}$ mass is **required** and can now be accomplished with one of several recently approved Federal Reference Methods (FRM) or Federal Equivalent Methods (FEM) described in the table[1] below. Monitoring agencies should include one of these methods in their next annual monitoring network plan and have the method operational by January 1, 2011. An annual monitoring network plan submitted to a Regional Office next summer does not need to seek EPA Administrator approval of a newly identified $PM_{10\text{-}2.5}$ mass FRM or FEM, so long as the NCore station has already been approved.

Manufacturer	Model	Method
BGI, Inc.	PQ200 Sampler Pair	Manual Reference Method: RFPS-1208-173
Thermo-Fisher, Inc.	Model 2000 $PM_{10\text{-}2.5}$ Sampler Pair	Manual Reference Method: RFPS-0509-175
Thermo-Fisher, Inc.	Model 2025 $PM_{10\text{-}2.5}$ Sequential Air Sampler Pair	Manual Reference Method: RFPS-0509-177
Thermo-Fisher, Inc.	2000-D Dichotomous Air Sampler	Manual Equivalent Method: EQPS-0509-178
Thermo-Fisher, Inc.	2025-D Dichotomous Air Sampler	Manual Equivalent Method: EQPS-0509-180
Met One, Inc.	BAM-1020 $PM_{10\text{-}2.5}$ Measurement System	Automated Equivalent Method: EQPM-0709-185

Measurement of $PM_{10\text{-}2.5}$ Speciation

Per the advice of the Clean Air Scientific Advisory Committee's (CASAC), Ambient Air Monitoring & Methods Subcommittee (AAMMS)[2], $PM_{10\text{-}2.5}$ speciation is **not** to be implemented at NCore at this time. Our office is working with two monitoring agencies to evaluate options for $PM_{10\text{-}2.5}$ speciation methods during a pilot study over the coming year. Also, consistent with the CASAC AAMMS advice, we will be considering what the optimum network design should be once a specified $PM_{10\text{-}2.5}$ speciation method is available for routine use. A letter and detailed comments from the subcommittee members is available on the web at: http://yosemite.epa.gov/sab/sabpeople.nsf/WebCommittees/CASAC. See: Advisory Reports for fiscal year 2009.

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[1] Table of $PM_{10\text{-}2.5}$ mass methods is current as of October 2009. For a list of the latest available designated reference and equivalent methods, see the AMTIC web site at: http://www.epa.gov/ttn/amtic/criteria.html.

[2] 2/11/09 Consultation on Ambient Air Monitoring Issues Related to the Coarse Particle Speciation by the Clean Air Scientific Advisory Committee (CASAC) Ambient Air Monitoring & Methods Subcommittee (AAMMS).

Enclosure B
Applicability of AQS Metadata for NCore

This enclosure provides information on the applicability of important metadata when setting up NCore sites, monitor records, and submitting data associated with NCore. This enclosure focuses on key metadata that may be most useful to data users. AQS requirements for metadata are more exhaustive than the fields listed in this enclosure and any required fields will still need to be populated, even if not specified below. For non-required fields, monitoring agencies are encouraged to supply other metadata that may also be useful to data users. Please incorporate this information into data reporting for your approved NCore Station(s).

Site Level:

The structure of the AQS data base requires that a "site" be set up prior to setting up monitor records. A site record in AQS defines information about the location of a monitoring station such as the street address; latitude and longitude; and the AQS State, County, and site ID. Except for a few completely new stations, most monitoring agencies have successfully set up the appropriate site information in AQS. Of the available fields to populate in a Site Record, we are asking for your attention in assuring that the following fields are appropriately populated.

Local Site Name – Although not required, we are asking you to populate this field with a descriptive name for your NCore station. This should be consistent with the site name identified in your NCore plan and may be associated with the site name identified on your own web site or on AIRNow. This should be populated with a name that is different than your 9-digit StateCountySite AQS ID. This will help in communicating your NCore Station with data users not familiar with AQS coding structure. If your agency already uses a code in this field for your own purposes, it is not necessary to provide a more descriptive entry.

A couple of examples of descriptive names provided in NCore plans are "Jefferson Elementary" for a site in Iowa and "Allen Park" for a site in Michigan.

Latitude and Longitude – Ensure the correct "Horizontal Datum" is populated with the coordinates. Monitoring agencies are encouraged to validate these coordinates with commercially available GPS units and/or by reviewing publically available satellite imagery such as on Google™ Earth.

Primary Monitor Periods – For $PM_{2.5}$ as a NAAQS criteria pollutant (parameter code 88101), the monitoring agency must identify which POC is the primary monitor in the "Primary Monitor Periods" screen. This is required to be populated even if there is only one registered POC for parameter code 88101. At this time, no other pollutants use this screen.

Monitor Level:

Monitor records are set up for each measured pollutant or meteorological parameter being reported to AQS. Therefore, there is a many to one relationship between monitor records and a monitoring station. Please update the following fields, as necessary, for each pollutant measurement reporting to AQS from your NCore Station.

Monitor Type – Each monitor operating at an NCore Station will typically have at least two monitor types associated with it.

EPA-OAQPS will be responsible for adding "NCore" as a monitor type for NCore measurements being reported at each approved NCore Station. Note: we will also remove "Proposed NCore," where applicable. For NCore measurements that come on-line and begin reporting after the initial round of NCore monitor type

associations, EPA-OAQPS will periodically review NCore Station data in AQS and add a monitor type of NCore for any remaining required NCore measurements being reported, but not already associated with a monitor type of NCore.

Each monitoring agency is responsible for populating a monitor type that provides the "Administrative Classification" of the monitor. For NCore Stations, this will largely be a monitor type of SLAMS since the majority of NCore Stations are operated by state and local agencies. A smaller number of NCore Stations are operated or coordinated with monitoring partners such as a Tribal Monitoring Program, the National Park Service, or EPA's CASTNET Program. In these cases, a monitor type of "Tribal Monitors," "Non-EPA Federal," or "CASTNET" can be used.

Measurement Scale – We are requesting that you populate this field for each monitor reporting data to AQS. For Urban and Suburban NCore Stations, this will most likely be either Neighborhood Scale or Urban Scale. For Rural NCore Stations, we are expecting the use of Regional Scale.

Monitoring Objective – All Urban and Suburban monitors reporting to AQS should use "Population Exposure" as the monitoring objective. Rural NCore stations should use the most appropriate choice between "Upwind Background," "General Background," "Regional Transport," or "Extreme Downwind." Other Monitoring objectives may apply, but are not expected.

Area Represented – For Urban and Suburban Stations, populate this field with the appropriate code for either the CBSA or CSA, if applicable. For Rural Stations, this field should not be populated.

Sample Frequency – A sample frequency is required to be associated with each of the PM measurements. For filter-based measurements this is typically on a schedule of "every 3rd day." However, some agencies may be operating their PM samplers on a daily schedule. Sample frequency does not need to be loaded for continuous measurements.

Data Level:

A few notes are provided below associated with submitting data records to AQS. Please incorporate these notes into your data reporting to AQS.

$PM_{2.5}$ Continuous Measurements – A technical note on the use of parameter codes for $PM_{2.5}$ continuous methods was issued on June 1, 2006. This technical note is available on the EPA's AMTIC web site at: http://www.epa.gov/ttn/amtic/datamang.html. On July 24, 2008, a memo was issued on "Implementing Continuous $PM_{2.5}$ Federal Equivalent Method (FEMs) and Approved Regional Methods (ARMs) in State or Local Air Monitoring Stations (SLAMS) Networks." This memo is available on the same web site listed above.

While monitoring agencies can operate either FEM's, ARM's (if one is approved), or well performing non-FEM/ARM $PM_{2.5}$ continuous monitors, agencies should report their data to either 88101, if it is an approved FEM or ARM, or to 88502, assuming it is a well performing $PM_{2.5}$ continuous method that is not approved as a FEM or ARM. Each NCore Station should have either an FEM/ARM or well performing $PM_{2.5}$ continuous method reporting to AQS so that these data can provide the high temporal resolution expected at NCore Stations for use in AQI reports and other assessments.

Method Code - Each data record includes a 3-digit method code that associates detail on the sampling and analysis method with a piece of data. Of particular note for NCore trace gas measurements of CO, SO_2, and NO/NO_y, monitoring agencies should be utilizing the appropriate method code associated with the trace gas measurements that provides a substantially improved detection limit. Default Method Detection Limits (MDL's) are provided for each commonly used trace gas method in the AQS data base. Monitoring agencies can also submit their own MDL, where applicable. Many, but not all, of the method codes associated with trace gas instruments have a method code in the range between 500 and 600.

Table of Select AQS Metadata associated with NCore

AQS Metadata Field	Location of Metadata	Are Multiple Options Allowed?	Does AQS Require this Field?	Expected Option(s) for NCore	Notes
Local Site Name	Site Level	No	No	We are requesting you identify your site name in AQS	Please use a descriptive name
Latitude	Site Level	No	Yes	8 digits, including 6 past the decimal place with a positive sign indicating above the equator (+xx.xxxxxx)	Ensure the correct "Horizontal Datum" is populated with the coordinates
Longitude	Site Level	No	Yes	9 digits, including 6 past the decimal place with a sign (+xxx.xxxxxx)	
Primary Monitor Periods	Site Level	No	Yes, but only for 88101	Always populate for $PM_{2.5}$ (parameter code 88101)	
Monitor Type	Monitor Level	Yes	Yes	NCore	EPA-OAQPS will update or add "NCore" as a monitor type for each approved NCore Station
				SLAMS, Tribal Monitors, Non-EPA Federal, or CASTNET	Monitors at each station should also identify one of the Monitor Types on the left
				Other Monitor types such as IMPROVE, PAMS, or Trends Speciation may also apply	
Measurement Scale	Monitor Level	No	No – however, we are requesting you populate this field	Neighborhood Scale 500M to 4KM	Expect one of these for monitors at Urban or Suburban Stations
				Urban Scale 4 KM to 50 KM	
				Regional Scale 50 to hundreds KM	Expected for monitors at Rural Stations
Monitoring Objective	Monitor Level	Yes	Yes	Population Exposure	For monitors at all Urban and Suburban NCore Stations
				Upwind Background, General Background, Regional Transport, or Extreme Downwind	Expect one of these for monitors at Rural NCore Stations
				Other Monitoring Objectives may apply for either Urban or Rural NCore Stations; however, one of the above should be utilized at a minimum	
Area Represented	Monitor Level	Only one type of area (CBSA or CSA) can be listed per objective	No – however, we are requesting you populate this field	CBSA Represented	Urban Stations should use one of the following
				CSA Represented	
				Rural Stations should not populate this field	
Sample Frequency	Monitor Level	No	Required only for PM	Relevant sample frequencies include: 1 Every Day 3 Every 3rd day	PM monitoring is required at a minimum frequency of one in every 3rd day