



REGION 4

ATLANTA, GA 30303

October 28, 2025

Rhonda B. Thompson
South Carolina Department
of Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

Dear Ms. Thompson:

Thank you for submitting the 2025 Annual Ambient Air Monitoring Network Plan (Network Plan) for the South Carolina Department of Environmental Services (SCDES), which was received on July 1, 2025. The Network Plan is required by 40 Code of Federal Regulations (CFR) §58.10 and is an essential part of implementing sections 103, 110 and 319 of the Clean Air Act.

The Environmental Protection Agency understands that SCDES provided the public an inspection and comment period for the draft Network Plan from April 25, 2025 – May 27, 2025. SCDES did not receive any public comments. The Network Plan meets the minimum requirements of 40 CFR Part 58. The EPA approves the 2025 South Carolina Network Plan and the proposed monitoring network changes.

On July 21, 2023, the Office of Management and Budget released revised delineations of Metropolitan Statistical Areas (MSAs) and their associated counties. Based on the population estimates in these revised MSAs and the most recent ozone design values, two new ozone sites are required in the network. SCDES is investigating possible locations for the two newly required sites in the Spartanburg, SC MSA and the Myrtle Beach-Conway-North Myrtle Beach SC MSA. The EPA supports SCDES searching for new sites and will be happy to collaborate with SCDES. The EPA requests that the location of the new sites and all information required by 40 CFR § 58.10(b) for proposed sites be included in the Network Plan due July 1, 2026. Recently, SCDES shut down the special purpose lead (Pb) monitor at JCI Woods site since the nearby Pb emissions source has ceased operation. SCDES worked with the EPA when deciding to shut down the site and the EPA Region 4 acknowledges the shutdown.

The 5-year Network assessment was submitted to the EPA on July 1, 2025. This satisfies the submission requirement of 40 CFR Part 58.10(d). Detailed comments on the SCDES Network Plan are enclosed. Thank you for working with the EPA Region 4 to monitor air pollution and promote clean air in South Carolina. If you have any questions or concerns, please contact Katy R. Lusky at (404) 562-9130 or Katie Marie Beck at (404) 562-8166.

Sincerely,

Denisse D. Diaz
Director
Air and Radiation Division

Enclosure

cc: Micheal Mattocks, Assistant Bureau Chief, Bureau of Regional and Laboratory Services BRLS
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U.S. EPA Region 4 – South Carolina Department of Environmental Sciences (SCDES) Ambient Air Monitoring Network Plan Review

This enclosure documents the EPA Region 4 review of SCDES Ambient Air Monitoring 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 (O₃), particulate matter less than 2.5 microns (PM_{2.5}), particulate matter less than 10 microns (PM₁₀), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), and lead (Pb).

A. Proposed Changes and the EPA Comments 40 CFR §58.10(b), §58.14

The EPA has approval authority for changes to state or local air monitoring stations (SLAMS). SLAMS include the ambient air quality monitoring sites and monitors that are required by Appendix D of 40 CFR Part 58 and are needed to meet the monitoring objectives of Appendix D, including comparisons to the national ambient air quality standards (NAAQS), but may also serve other data purposes. The EPA is not required to approve changes made to special purpose monitors (SPMs). SPMs are monitors designated by the monitoring agency as special purpose and do not count towards meeting minimum monitoring requirements of 40 CFR Part 58. SPMs are required to be identified in the Network Plan for the public and the EPA review.

Monitors proposed for discontinuation, start-up, reconfiguration, or relocation and the EPA's decision and rationale for approval/disapproval/acknowledgement of each proposed change are summarized in Table A-1. For any relocated monitors, unless noted below, the EPA approves the use of a combined dataset between the existing and proposed sites for the purpose of calculating air quality design values. The detailed rationale for approval/disapproval of each proposed change is contained in the following pollutant-specific sections.

Table A-1: Proposed Changes in Monitoring Network

Core-based Statistical Area (CBSA)	AQS ID and Site Name	Pollutant	Type	Comments
Florence Metropolitan Statistical Area (MSA)	JCI Woods (AQS ID: 45-041-8003)	Lead (Pb)	SPM	Acknowledged. South Carolina shut down the Clarios Woods Monitoring Site on March 26, 2025. SCDES worked with the EPA Region 4 when deciding to shut down this location.
Myrtle Beach-Conway-North Myrtle Beach, SC MSA	None	Ozone	SLAMS	Acknowledged. SCDES has started the process of finding an appropriate site for a second ozone monitor in the MSA. The EPA thanks SCDES for sending in information for a possible location and requests that SCDES include a

Core-based Statistical Area (CBSA)	AQS ID and Site Name	Pollutant	Type	Comments
				full site proposal in the Network Plan due July 1, 2026.
Spartanburg, SC MSA	None	Ozone	SLAMS	Acknowledged. SCDES has started the process of finding an appropriate site for a second ozone monitor in the MSA. The EPA will work with SCDES to select an appropriate location and requests that SCDES include a full site proposal in the Network Plan due July 1, 2026.
Augusta-Richmond County, GA-SC MSA	Trenton (AQS ID: 45-037-0001)	SO ₂	SPM	Acknowledged. The Trenton monitoring site will begin operating an SPM rotating SO ₂ monitor on January 1, 2026.
Charlotte-Concord-Gastonia, NC-SC MSA	York Landfill (AQS ID: 45-091-0008)	SO ₂	SPM	Acknowledged. The SPM rotating SO ₂ monitor will be moved to the Trenton Monitoring site on December 31, 2025.
Columbia, SC MSA	Congaree Bluff (AQS ID: 45-079-0021)	N/A	Waiver Request	Approved. The EPA approves the waiver request for the spacing of trees requirement.
Greenville-Anderson-Greer, SC MSA	Greenville ESC (AQS ID: 45-045-0015)	N/A	Waiver Request	Approved. The EPA approves the waiver request for the spacing of trees requirement.

B. Public Comments
40 CFR § 58.10 (a)(1)

The requirement for a public comment period and response from the Agency in the final Network Plan is found in 40 CFR § 58.10 (a)(1):

“The annual monitoring network plan must be made available for public inspection and comment for at least 30 days prior to submission to the EPA and the submitted plan shall also include and address, as appropriate, any received comments.”

The public comment period for the Network Plan was held from April 25, 2025 – May 27, 2025. South Carolina received no public comments on this network plan.

Table B-1: Public Comments and Responses (40 CFR § 58.10 (a)(1))

Summary of Public Comment	Agency Response	The EPA Comments
No Public Comments were received	NA	NA

The submitted Network Plan meets the public comment requirements of 40 CFR § 58.10.

C. Regulatory Requirements

40 CFR § 58.10(a)(1) requires that each Network Plan shall provide for the documentation of the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations that can include Federal Reference Method (FRM) and Federal Equivalent Method (FEM) monitors that are part of SLAMS, National Core Monitoring Sites (NCore), Chemical Speciation Network (CSN), Photochemical Assessment Monitoring System (PAMS), and SPM stations.

40 CFR § 58.10(a)(1) further directs that, “The 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.” On this basis, review of the Network Plan is based on the requirements listed in 40 CFR § 58.10 along with those in Appendices A, C, D, and E.

Table C-1: Monitoring Network Plan Checklist

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
GENERAL PLAN REQUIREMENTS					
1.	Submit plan by July 1 st	58.10 (a)(1)	Yes	Yes	
2.	30-day public comment / inspection period	58.10 (a)(1); 58.10 (c)	Yes	Yes	
3.	Statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E, where applicable	58.10 (a)(1)	Yes	Yes	
4.	Modifications to SLAMS network	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	Yes	Yes	
5.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last Annual Network Plan (ANP) approval?		NA	NA	There have not been any modifications to the network plan that require the EPA approval.
6.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	Yes	Yes	

¹ Unless otherwise noted.

² Response options: NA (Not Applicable), Yes, No, or Incomplete.

³ Response options: NA (Not Applicable) – [reason], Yes, No, Insufficient to Judge, or Incorrect

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
7.	Statement that SPMs operating an FRM/FEM/ARM that meet Appendix E also meet either Appendix A or an approved alternative. Documentation for any Appendix A approved alternative should be included. ⁴	58.11 (a)(2)	Yes	Yes	
8.	SPMs operating FRM/FEM/ARM monitors for over 24 months are listed as comparable to the NAAQS or the agency provided documentation that requirements from Appendices A, C, or E were not met. ⁵	58.20 (c)	Yes	Yes	
9.	For agencies that share monitoring responsibilities in an MSA/Combined Statistical Area (CSA): this agency meets full monitoring requirements or an agreement between the affected agencies and the EPA Regional Administrator is in place	App D 2(e)	Yes	Yes	
PM_{2.5} SPECIFIC MONITORING REQUIREMENTS					
10.	Document how states and local agencies provide for the review of changes to a PM _{2.5} monitoring network that impact the location of a violating PM _{2.5} monitor.	58.10 (c)	N/A	N/A	No relocation of violating monitor proposed. 30-day comment period conducted for entire plan.
11.	Identification of any PM _{2.5} FEMs and/or ARMs not eligible to be compared to the NAAQS due to poor comparability to FRM(s) [Note 1: must include required data assessment.] [Note 2: Required SLAMS must monitor PM _{2.5} with NAAQS-comparable monitor at the required sample frequency.]	58.10 (b)(13) 58.11 (e)	NA	NA	Current NAAQS exclusions are for SPM PM _{2.5} FEMs while comparability with FRMs is assessed.
12.	Minimum # of monitoring sites for PM _{2.5} [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMS are eligible to be counted towards meeting minimum monitoring requirements.]	App. D 4.7.1(a) and Table D-5	Yes, Pg 36-37	Yes	
13.	Requirements for continuous PM _{2.5} monitoring (number of monitors and collocation)	App. D 4.7.2	Yes, Pg 34-35	Yes	
14.	FRM/FEM/ARM PM _{2.5} QA collocation	App. A 3.2.3	Yes	Yes	

⁴ Alternatives to the requirements of appendix A may be approved for an SPM site as part of the approval of the annual monitoring plan, or separately.

⁵ This requirement only applies to monitors that are eligible for comparison to the NAAQS per 40 CFR §§58.11(e) and 58.30.

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
15.	PM _{2.5} Chemical Speciation requirements for official STN sites	App. D 4.7.4	Yes, Pg 39	Yes	
16.	Identification of sites suitable and sites not suitable for comparison to the annual PM _{2.5} NAAQS as described in Part 58.30	58.10 (b)(7)	Yes	Yes	Done at each site-specific page
17.	Required PM _{2.5} sites represent area-wide air quality	App. D 4.7.1(b)	Yes	Yes	
18.	For PM _{2.5} , within each MSA, at least one site at neighborhood or larger scale in an area of expected maximum concentration	App. D 4.7.1(b)(1)	Yes	Yes	
19.	If additional SLAMS PM _{2.5} is required, there is a site in an area of poor air quality	App. D 4.7.1(b)(3)	NA	NA	No additional SLAMS PM _{2.5} required
20.	States must have at least one PM _{2.5} regional background and one PM _{2.5} regional transport site.	App. D 4.7.3	Yes	Yes	Listed with each site-specific page
21.	Sampling schedule for PM _{2.5} - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4); 58.12(d); App. D 4.7	Yes	Yes	Listed with each site-specific page
PM₁₀ SPECIFIC MONITORING REQUIREMENTS					
22.	Minimum # of monitoring sites for PM ₁₀ [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D, 4.6 (a) and Table D-4	Yes, Pg 40-41	Yes	
23.	Manual PM ₁₀ method collocation (note: continuous PM ₁₀ does not have this requirement)	App. A 3.3.4	NA	NA	All monitors are continuous
24.	Sampling schedule for PM ₁₀	58.10 (b)(4); 58.12(e); App. D 4.6	Yes	Yes	Continuous monitors are operated year-round
Pb SPECIFIC MONITORING REQUIREMENTS					
25.	Minimum # of monitors for Pb [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.5	NA	NA	There are no sources in South Carolina with required Pb monitoring.
26.	Pb collocation	App A 3.4.4 and 3.4.5	NA	NA	There are no sources in South Carolina with required Pb monitoring.

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
27.	Any source-oriented Pb site for which a waiver has been granted by the EPA Regional Administrator	58.10 (b)(10)	NA	NA	There are no sources in South Carolina with required Pb monitoring.
28.	Any Pb monitor for which a waiver has been requested or granted by the EPA Regional Administrator for use of Pb-PM ₁₀ in lieu of Pb-TSP	58.10 (b)(11)	NA	NA	There are no sources in South Carolina with required Pb monitoring.
29.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	NA	NA	There are no sources in South Carolina with required Pb monitoring.
30.	Sampling schedule for Pb	58.10 (b)(4); 58.12(b); App A 3.4.4.2 (c) and 3.4.5.3 (c)	NA	NA	There are no sources in South Carolina with required Pb monitoring.
O₃ SPECIFIC MONITORING REQUIREMENTS					
31.	Minimum # of monitoring sites for O ₃ [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] [Note 3: monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR Appendix E, Table E-1) cannot be counted towards meeting minimum monitoring requirements]	App D 4.1(a) and Table D-2	Yes	Yes	South Carolina is currently searching for locations for two required Ozone monitors for Myrtle Beach-North Myrtle Beach-Conway, SC MSA and Spartanburg, SC MSA. The EPA requests that SCDES include site proposals for both sites in the network plan due July 1, 2026.
32.	Identification of maximum concentration O ₃ site(s)	App D 4.1 (b)	Yes	Yes	
33.	Sampling season for O ₃ (Note: Waivers must be renewed annually. The EPA expects agencies to submit re-evaluations of the relevant data each year with the ANP. The EPA will then respond as part of the ANP response.)	58.10 (b)(4); App D 4.1(i)	Yes	Yes	All ozone monitors in South Carolina are operated from March – October as required. NCore ozone operates year-round.
34.	An Enhanced Monitoring Plan for O ₃ , if applicable, no later than October 1, 2019, or two years following the effective date of a designation to a classification of Moderate or above O ₃ nonattainment, whichever is later.	58.10 (a)(11); App D 5 (h)	NA	NA	No enhanced monitoring plan required as there are no ozone nonattainment areas in South Carolina.
NO₂ SPECIFIC MONITORING REQUIREMENTS					

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
35.	Minimum monitoring requirements for area-wide NO ₂ monitor in location of expected highest NO ₂ concentrations representing neighborhood or larger scale	App D 4.3.3	Yes	Yes	
36.	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO ₂	App D 4.3.4	Yes, Pg 26	Yes	RA40
37.	Identification of required NO ₂ monitors as either near-road, area-wide, or vulnerable and susceptible population (aka RA40)	58.10 (b)(12)	Yes, Pg 25	Yes	
NEAR ROADWAY SPECIFIC MONITORING REQUIREMENTS					
38.	NO ₂ near- road monitors (See table D-7 for calculated minimums by CBSA)	App. D 4.3.2(a); 58.13(c)(3) and (4)	Yes, Pg. 25	Yes	Fulfilled at the Remount Road and Equipment Drive monitoring sites operated by Mecklenburg County Air Quality (MCAQ)
39.	CO near-road monitors	App. D 4.2.1(a); 58.13(e)(2)	Yes, Pg 22	Yes	Fulfilled by the Remount Road monitoring site operated by MCAQ
40.	PM _{2.5} near-road monitors	App. D 4.7.1(b)(2); 58.13(f)(2)	Yes, Pg 36	Yes	Fulfilled at the Remount Road monitoring site operated by MCAQ
SO₂ SPECIFIC MONITORING REQUIREMENTS					
41.	Minimum monitoring requirements for SO ₂ based on population weighted emissions index and/or RA required monitors under Appendix D 4.4.3 [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.4	Yes	Yes	
42.	Monitors used to meet Data Requirements Rule	51.1203(c)	NA	NA	There are no SO ₂ DRR Monitors in South Carolina.
NCORE SPECIFIC MONITORING REQUIREMENTS					
43.	NCore site and all required parameters operational: year-round O ₃ , SO ₂ , CO, NO _y , NO, PM _{2.5} mass, PM _{2.5} continuous, PM _{2.5} speciation, PM _{10-2.5} mass, resultant wind speed at 10m, resultant wind direction at 10m, ambient temperature, relative humidity. NO _y waiver, if applicable.	App. D 3(b)	Yes, Pg. 65	Yes	

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
44.	PAMS site and all required parameters operational.	58.10 (a)(10); 58.13 (h)	Yes, Pg 42	Yes	
SITE OR MONITOR SPECIFIC REQUIREMENTS					
45.	AQS site identification number for each site	58.10 (b)(1)	Yes	Yes	
46.	Location of each site: street address and geographic coordinates	58.10 (b)(2)	Yes	Yes	
47.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	Yes	Yes	
48.	Basic monitoring objective for each monitor	App D 1.1; 58.10 (b)(6)	Yes	Yes	
49.	Site type for each monitor	App D 1.1.1	Yes	Yes	
50.	Monitor type for each monitor, and Network Affiliation(s) as appropriate	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes	Yes	
51.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	Yes	Yes	
52.	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2	Yes	Yes	
RECOMMENDED SITE OR MONITOR SPECIFIC INFORMATION (Appendix E information required for new sites)					
53.	Parameter occurrence code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes	Yes	
54.	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes	Yes	
55.	Sampling start date for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	No	Yes	Site establishment date is included.

	Network Plan requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, list section or page #s.	Requirement Met? ³	Notes
56.	Distance of monitor from nearest road	App E 6	No	Yes	Not required. They do include the site evaluation date for each monitoring site
57.	Traffic count of nearest road	App E	No	Yes	Not required. They do include the site evaluation date for each monitoring site
58.	Groundcover	App E 3(a)	No	Yes	Not required. They do include the site evaluation date for each monitoring site
59.	Probe height	App E 2	No	Yes	Not required. They do include the site evaluation date for each monitoring site
60.	Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	App E 2	No	Yes	Not required. They do include the site evaluation date for each monitoring site
61.	Distance from obstructions on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(b)	No	Yes	Not required. They do include the site evaluation date for each monitoring site
62.	Distance from obstructions not on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(a)	No	Yes	Not required. They do include the site evaluation date for each monitoring site
63.	Distance from the drip line of closest tree(s)	App E 5	No	Yes	Not required. They do include the site evaluation date for each monitoring site
64.	Unrestricted airflow (expressed as degrees around probe/inlet or percentage of monitoring path)	App E, 4(a) and 4(b)	No	Yes	Not required. They do include the site evaluation date for each monitoring site

C.1. Additional Discussion

Lead monitoring has been discontinued at the Clarios Woods Monitoring Site. The last day of sampling was March 26, 2025. South Carolina has no sources that exceed the emissions thresholds for Pb monitoring. Previously, the SCDES and Clarios, LLC (formerly Johnson Controls Battery Group) conducted source-oriented ambient Pb monitoring at three SPM sites around the Florence Recycling Center in Florence, South Carolina. The facility ceased production March 22, 2021, and has had emissions well below the NAAQS in the years following the shutdown. Although the EPA approval is not explicitly required, SCDES worked with the EPA Region 4 when deciding to shut down the Pb site.

On July 21, 2023, the Office of Management and Budget released revised delineations⁶ of MSAs and their associated counties. This removed Brunswick County, North Carolina from the Myrtle Beach-Conway-North Myrtle Beach, SC MSA and added Union County to the Spartanburg, SC MSA. A second ozone monitor is now required for both MSAs due to the most recent population estimates and O₃ design values in each MSA. The SCDES is investigating possible locations for a new site and working with the EPA Region 4. The EPA requests that SCDES submit site proposals in the network plan due July 1, 2026, and include the information required by 40 CFR 58.10(b) for each proposed site.

The EPA approves a renewal of the Congaree Bluff (AQS ID: 45-079-0021) siting waiver. The objective of the Congaree Bluff site is to measure O₃ and SO₂ within the Congaree National Park boundaries. Within the national park boundaries this monitor cannot be reasonably located to meet the siting criteria because of physical constraints. The EPA staff visited the Congaree Bluff site on January 25, 2016, and agree that this is the best monitoring location within the park boundaries. The site meets the requirements for a siting criteria waiver under 40 CFR Part 58, Appendix E Section 4.1.2. The EPA waives the requirements for spacing of trees under 40 CFR Part 58, Appendix E, Section 2.4(a) and spacing from obstructions under 40 CFR Part 58, Appendix E, Section 2.3(a). The EPA encourages the SCDES to meet siting criteria requirements as much as possible at this site but understands the National Park Service's and SCDES's hesitation to remove trees in an old growth forest. Thus, the EPA waives the spacing from trees requirement for the one branch identified by SCDES in the Network Plan. This site must still meet all other siting requirements found in Appendix E to 40 CFR Part 58.

The EPA approves the submitted siting criteria waiver renewal request for the Greenville Site (AQS ID: 45-045-0015) under 40 CFR Part 58, Appendix E, Section 4.1.1. The EPA recognizes that the site met previous siting criteria for PM_{2.5} of having at least 270 degrees clearance but does not meet the updated siting criteria of 270 *continuous* clearance under 40 CFR Part 58, Appendix E, Section 2.3(b). EPA also recognizes that SCDES is limited by the presence of underground utilities and are unable to remove the trees. The site meets all other siting criteria and can be waved under 40 CFR Part 58, Appendix E, Section 4.1.1 because it does have a combined 270 degrees of clearance and is as representative of the monitoring area as it would be if the siting criteria were being met. The EPA waives the "continuous arc of at least 270 degrees" requirement under 40 CFR Part 58, Appendix E Section E 2.3(b).

⁶ OMB Bulletin No. 23-01. Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas. July 21, 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/07/OMB-Bulletin-23-01.pdf>.

D. Monitoring Network Details

The following tables compare the monitors listed in the Network Plan to the pollutant-specific network design requirements found in 40 CFR Part 58, Appendix D.

Table D-1: July 1, 2024, Population Estimates from U.S. Census Bureau and AQI Reporting by Core Based Statistical Area (40 CFR §58.50)

CBSA	Population	AQI Requirement Met? (Y/N) ⁷
Augusta-Richmond County, GA-SC MSA	636,760	Y
Charleston-North Charleston, SC MSA	869,940	Y
Charlotte-Concord-Gastonia, NC-SC MSA	2,883,370	Y
Columbia, SC MSA	870,193	Y
Florence, SC MSA	200,474	Y
Greenville-Anderson-Greer, SC MSA	996,680	Y
Hilton Head Island-Bluffton-Port Royal, SC MSA	237,393	Y
Myrtle Beach-Conway-North Myrtle Beach, SC MSA	413,391	Y
Spartanburg, SC MSA	395,934	Y
Sumter, SC MSA	104,776	y

⁷ AQI reporting is required in MSAs with populations over 350,000

Table D-2: NCore Monitoring Sites (40 CFR Part 58, Appendix D, Section 3.0)

CBSA	AQS ID and Site Name	Requirement Met? (Y/N)
Columbia MSA	Parklane (45-079-0007)	Y

Table D-3: Requirements and Counts of SLAMS O₃, Area Wide NO₂, and SO₂ Monitors (40 CFR Part 58, Appendix D, Sections 4.2, 4.3.2, and 4.7.1(b)(2))

CBSA	AQS ID and Site Name	SLAMS Monitors			O ₃			Area Wide NO ₂			SO ₂		
		O ₃	Area Wide NO ₂	SO ₂	Min.	Tot.	Met	Min.	Tot.	Met	Min.	Tot.	Met
Augusta-Richmond County, GA-SC MSA	Jackson Middle School (AQS ID: 45-003-0003)	X			2	3	Y	0	0	Y	1	1	Y
	Trenton (AQS ID: 45-037-0001)	X											
	Augusta (AQS ID: 13-245-0091) ¹	X		X									
Charleston-North Charleston, SC MSA	Moncks Corner National Guard (AQS ID: 45-015-1002)	X			2	2	Y	0	0	Y	1	1	Y
	Jenkins Ave. Fire Station (AQS ID: 45-019-0003)			X									
	Cape Romain (AQS ID: 45-019-0046)	X											
Charlotte-Concord-Gastonia, NC-SC MSA	York Landfill (AQS ID: 45-091-0008)	X			2	4	Y	1	1	Y	1	1	Y
	Garinger NCore (AQS ID: 37-119-0041) ²	X	X	X									
	University Meadows (AQS ID: 37-119-0046) ²	X											
	Crouse (AQS ID: 37-109-0004) ³	X											
Columbia, SC MSA	Parklane (AQS ID: 45-079-0007) (NCore)	X	X	X	2	2	Y	1	1	Y	1	1	Y
	Sandhill (AQS ID: 45-079-1001)	X											
Florence, SC MSA	Pee Dee Experimental Station (AQS ID: 45-031-0003)	X			1	1	Y	0	0	Y	0	0	Y
Greenville-Anderson-Greer, SC MSA	Garrison Arena (AQS ID: 45-007-0006)	X			2	2	Y	0	1	Y	0	1	Y
	Greenville ESC (AQS ID: 45-045-0015)		X	X									
	Hillcrest (AQS ID: 45-045-0016)	X											
Myrtle Beach-Conway-North Myrtle Beach, SC MSA	Coastal Carolina (AQS ID: 45-051-0008)	X			2	1	N ³	0	0	Y	0	0	Y

CBSA	AQS ID and Site Name	SLAMS Monitors			O ₃			Area Wide NO ₂			SO ₂		
		O ₃	Area Wide NO ₂	SO ₂	Min.	Tot.	Met	Min.	Tot.	Met	Min.	Tot.	Met
Spartanburg, SC MSA	North Spartanburg Fire Station #2 (AQSI ID: 45-019-0020	X			2	1	N ³	0	0	Y	0	0	Y

1. Required Ozone and SO₂ monitors for the CBSA are located in the Augusta-Richmond County, GA-SC MSA, which is operated by the Georgia Environmental Protection Division at the Augusta site.
2. Required Ozone monitors for the CBSA are located in the Charlotte Metro area and are operated by Mecklenburg County Air Quality.
3. Required Ozone monitor for the CBSA are located in the Charlotte Metro area and is operated by the North Carolina Department of Air Quality.
4. SCDES is investigating new site locations for the second required Ozone monitor in the MSA. The EPA will work with SC to meet these new requirements that resulted from new CBSA definitions and population estimates.

Table D-4: Requirements and Counts of SLAMS Near-road Monitors (40 CFR Part 58, Appendix D, Sections 4.2, 4.3.2, and 4.7.1(b)(2))

CBSA	AQS ID and Site Name	Near-Road Monitors			CO			NO ₂			PM _{2.5}		
		CO	NO ₂	PM _{2.5}	Min.	Tot.	Met	Min.	Tot.	Met	Min.	Tot.	Met
Charlotte-Concord-Gastonia NC-SC MSA	Remount Road Monitoring Site ¹ (AQSI ID: 37-119-0045)	X	X	X	1	1	Y	2	2	Y	1	1	Y
	Equipment Drive Monitoring Site ¹ (AQSI ID: 37-119-0050)		X										

1. Required Near-road monitors for the CBSA are located in the Charlotte Metro area and are operated by Mecklenburg County Air Quality.

Table D-5: Minimum Required SLAMS RA Monitors (40 CFR Part 58, Appendix D Sections 4.2.2, 4.3.4, and 4.4.2)

CBSA	AQS ID and Site Name	Pollutant	# of Minimum Required RA Monitors	# of RA Monitors in Plan	Requirement Met? (Y/N)
Greenville-Spartanburg- Anderson CSA / Greenville- Anderson-Greer, SC MSA	Greenville Employment Security Commission (ESC) (AQSI ID: 45-045-0015)	NO ₂	1	1	Y

Table D-6: Minimum Required SLAMS Source-Oriented and Collocated Pb Monitors (40 CFR Part 58, Appendix A, 3.4.4 and 40 CFR Part 58, Appendix D, Section 4.5)

CBSA	AQS ID and Site Name	Source Name	Source-oriented Pb			Collocated Pb		
			Min.	Tot.	Met	Min.	Tot.	Met
NA	NA	There are no required Pb monitors for SCDES because no sources emit > 0.5 tpy of Pb.	0	0	Y	0	0	Y

Table D-7: Minimum Required SLAMS PM₁₀ and Collocated PM₁₀ Monitors (40 CFR Part 58, Appendix A, Section 3.3 and 40 CFR Part 58, Appendix D, Section 4.6, and Table D-4)

CBSA	AQS ID and Site Name	Monitors		PM ₁₀			Collocated PM ₁₀		
		PM ₁₀	Col.	Min.	Tot.	Met	Min.	Tot.	Met
Columbia, SC MSA	Parklane (NCore) (AQS ID: 45-079-0007)	X		1	1	Y	0	0	Y
Greenville-Anderson-Greer, SC MSA	Greenville ESC (AQS ID: 45-045-0015)	X		1	1	Y	0	0	Y
Augusta-Richmond County, Ga-SC MSA	Augusta Monitoring Site (GA) ¹ (AQS ID: 13-245-0091)	X		1	1	Y	0	0	Y
Charleston-North Charleston, SC MSA	North Charleston Fire Station (AQS ID: 45-019-0020)	X		1	1	Y	0	0	Y
Charlotte-Concord-Gastonia, NC-SC MSA	Garinger ² (AQS ID: 37-119-0041)	X		2	2	Y	0	0	Y
	Ramblewood Park (37-119-0047) ²	X							

1. Required PM₁₀ monitor for the CBSA is located in the Augusta-Richmond County, GA-SC MSA, which is operated by the Georgia Environmental Protection Division.

2. Required PM₁₀ monitors for the CBSA are located in the Charlotte Metro area and are operated by the Mecklenburg County Air Quality.

Table D-8: Minimum Required PM_{2.5} and Collocated PM_{2.5} Monitors (40 CFR Part 58, Appendix A, Section 3.2 and 40 CFR Part 58, Appendix D, Section 4.7, and Table D-5)

CBSA	AQS ID and Site Name	PM _{2.5} Monitor					SLAMS Sites/Primary Monitors			Continuous		
		Type	Method Code	Cont.	Collocated Method Code	Other	Min.	Tot.	Met	Min.	Tot.	Met
Augusta-Richmond County, GA-SC MSA	Augusta (AQS ID: 13-245-0091) ¹	SLAMS	145 ^P		145		2	2	Y	1	1	Y
		SPM	638	X		NE						
	Trenton (AQS ID: 45-037-0001)	SLAMS	145 ^P									
Charleston-North Charleston, SC MSA	North Charleston Fire Station (NCFS) (AQS ID: 45-019-0020)	SLAMS	145 ^P	X	145, 638		1	2	Y	1	2	Y
	Cape Romain (AQS ID: 45-019-0046)	SLAMS	636 ^P	X	NA	BG						
Charlotte-Gastonia-Concord NC-SC	Garinger (37-119-0041) ²	SLAMS	170	X	145		3	3	Y	2	3	Y
	Friendship Park (37-119-0048) ²	SLAMS	209	X								
	Remount (37-119-0045) ²	SLAMS	209	X	145	NR						
Columbia, SC MSA	Parklane (NCore) (AQS ID: 45-079-0007)	SLAMS	145 ^P	X	145, 638	NCore	1	2	Y	1	2	1
	Irmo DJJ (AQS ID: 45-079-0022)	SLAMS	145 ^P	X	636							
Florence, SC MSA	Williams Middle School (AQS ID: 45-041-0003)	SLAMS	145 ^P	X	636		1	1	Y	1	1	Y
Greenville-Anderson-Greer, SC MSA	Greenville ESC (AQS ID: 45-045-0015)	SLAMS	145 ^P	X	638		2	2	Y	1	1	Y
	Hillcrest (AQS ID: 45-045-0016)	SLAMS	145 ^P		145							
Spartanburg, SC MSA	T.K. Gregg (AQS ID: 45-083-0011)	SLAMS	145 ^P	X	636		1	1	Y	1	1	Y
None	Chesterfield (AQS ID: 45-025-0001)	SLAMS	636 ^P	X	145	TP	1	1	Y	0	1	Y

BG = Background; TP = Transport; I = IMPROVE; NR = Near-road; ^P = Primary monitor NE = NAAQS Exclusion (See Table D-10);

1. Required PM_{2.5} monitors for the CBSA are located in the Augusta-Richmond County, GA-SC MSA, which is operated by the Georgia Environmental Protection Division at the Augusta site.

2. Required PM_{2.5} monitors for the CBSA are located in the Charlotte Metro area and are operated by Mecklenburg County Air Quality.

Table D-9: Minimum Required Collocated PM_{2.5} Monitors (40 CFR Part 58 Appendix A, Section 3.2.3.1)

PQAO	AQS ID and Site Name	Method	AQS Method Code	# of Primary PM _{2.5} Monitors	# of Minimum Required Collocated PM _{2.5} Monitors	# of Collocated PM _{2.5} Monitors	Requirement Met? (Y/N)
SCDES	Hillcrest (AQS ID: 45-019-0020) Parklane (AQS ID: 45-079-0007) North Charleston Fire Station (AQS ID: 45-019-0020)	FRM	145	7	1	3	Y
	Chesterfield (AQS ID: 45-025-0001)	Teledyne T640	636	2	1	1	Y

Table D-10: PM_{2.5} NAAQS Exclusions (40 CFR Part 58.11(e))

CBSA	AQS ID and Site Name	FEM Method Description	FEM Method Code	Comments
Augusta-Richmond County, GA-SC MSA	Trenton (AQS ID: 45-037-0001)	Teledyne T640 with Network Data Alignment Enabled	636	Data collected by the FEM T640 monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Charleston-North Charleston, SC MSA	North Charleston Fire Station (AQS ID: 45-019-0020)	Teledyne T640 with Network Data Alignment Enabled	638	Data collected by the FEM T640X monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Columbia, SC MSA	Irmo DJJ (AQS ID: 45-079-0022)	Teledyne T640 with Network Data Alignment Enabled	636	Data collected by the FEM T640 monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will

				coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Florence, SC MSA	Williams Middle School (AQS ID: 45-041-0003)	Teledyne T640 with Network Data Alignment Enabled	636	Data collected by the FEM T640 monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Spartanburg, SC MSA	T.K. Gregg Recreation Center (AQS ID: 45-083-0011)	Teledyne T640 with Network Data Alignment Enabled	636	Data collected by the FEM T640 monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Columbia, SC MSA	Parklane (AQS ID: 45-079-0007)	Teledyne T640X with Network Data Alignment Enabled	638	Data collected by the FEM T640X monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from. September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.
Greenville-Anderson-Greer, SC MSA	Greenville Employment Security Commission (AQS ID: 45-045-0015)	Teledyne T640X with Network Data Alignment Enabled	638	Data collected by the FEM T640X monitor at this site will be labeled with a NAAQS Exclusion for up to 23 months after the data alignment firmware update from September 6, 2023-September 6, 2025, to assess the comparability of the data to the FRM sampler. Now that the exclusion period has expired, the EPA will coordinate with the State to evaluate the PM _{2.5} comparability assessments for these FEMs and determine a path forward for those data.

Table D-11: PM_{2.5} Chemical Speciation Monitoring (40 CFR Part 58 Appendix D, Section 4.7.4)

CBSA	AQS ID and Site Name	Network	Sampling Frequency
Columbia, SC MSA	Parklane (AQS ID: 45-079-0007)	CSN, STN, NCore	1-in-3 days
Charlotte-Concord-Gastonia, NC-SC MSA	Garinger Monitoring Site ¹ (AQS ID: 37-119-0041)	NCore/STN	1-in-3 days

1. Required PM_{2.5} Chemical Speciation monitoring for the CBSA is located in the Charlotte Metro area and is operated by the Mecklenburg County Air Quality.

Table D-12: Air Toxics Monitoring

CBSA	AQS ID and Site Name	Network	Compounds Measured	Sampling Frequency
None	Chesterfield (AQS ID: 45-025-0001)	NATTS	Volatile Organic Compounds	1 in 6 days
		NATTS	Polycyclic Aromatic Hydrocarbons	1-in-6 days
		NATTS	Carbonyls	1-in-6 days
		NATTS	NATTS Metals	1-in-6 days

Table D-13: Non-SLAMS Monitors

CBSA	AQS ID and Site Name	Pollutant	Monitor Type
Augusta-Richmond County, GA-SC MSA	Trenton (AQS ID 45-037-0001)	PM _{2.5} Continuous	SPM
Charleston-North Charleston, SC MSA	Jenkins Ave. First Station (AQS ID: 45-019-0003)	NO ₂	SPM
Charleston-North Charleston, SC MSA	North Charleston Fire Station (NCFS) (AQS ID: 45-019-0020)	PM _{2.5} Continuous	SPM
Charlotte-Concord-Gastonia, NC-SC MSA	York Landfill (AQS ID 45-091-0008)	SO ₂	SPM, Rotational Site
Columbia, SC MSA	Congaree Bluff (AQS ID: 45-079-0021)	O ₃	SPM
Columbia, SC MSA	Sandhill (AQS ID: 45-079-1001)	NO ₂ /NO/NO _y	SPM

CBSA	AQS ID and Site Name	Pollutant	Monitor Type
Florence, SC MSA	Williams Middle School (AQS ID: 45-041-0003)	PM _{2.5} Continuous	SPM
Greenville-Anderson-Greer, SC MSA	Greenville ESC (AQS ID: 45-045-0015)	PM _{2.5} Continuous	SPM
Myrtle Beach-Conway-North Myrtle Beach, SC MSA	Coastal Carolina (AQS ID: 45-051-0008)	PM _{2.5} Continuous	SPM

Table D-14: Summary of the EPA Approved Waivers of Requirements

CBSA	AQS ID and Site Name	Pollutant(s)	CFR Requirement Waived	The EPA Waiver Authority/ Rationale	Year Waiver First Granted	Waiver Expiration Year	Comments
Greenville-Anderson-Greer, SC MSA	Greenville ESC (AQS ID: 45-045-0015)	SO ₂ , NO ₂ , PM _{2.5} , PM ₁₀	40 CFR Part 58 Appendix E Section 4.1	40 CFR Part 58, Appendix E, Section 4.1.1	2025	2030	Approval of Spacing from Trees
Columbia, SC MSA	Congaree Bluff (AQS ID: 45-079-0021)	O ₃ , SO ₂	40 CFR Part 58, Appendix E, Section 4 & 11	40 CFR Part 58, Appendix E, Section 4.1.2	2025	2030	Approval of Spacing from Trees