

C. ANNUAL MONITORING NETWORK PLAN CHECKLIST

(Updated March 11, 2014)

Year:

Agency:

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) include information regarding the following types of monitors: SLAMS monitoring stations including FRM, FEM, and ARM monitors that are part of SLAMS, NCore stations, STN stations, State speciation stations, SPM stations, and/or, in serious, severe and extreme ozone nonattainment areas, PAMS stations, and SPM monitoring stations.

40 CFR 58.10(a)(1) further directs that, “The plan shall include a statement of purposes for each monitor and evidence that siting and operation of each monitor meets the requirements of appendices A, C, D, and E of this part, where applicable.” On this basis, review of the ANPs is based on the requirements listed in 58.10 along with those in Appendices A, C, D, and E.

EPA Region 9 will not take action to approve or disapprove any item for which Part 58 grants approval authority to the Administrator rather than the Regional Administrators, but we will do a check to see if the required information is included and correct. The items requiring approval by the Administrator are: PAMS, NCore, and Speciation (STN/CSN).

Please note that this checklist summarizes many of the requirements of 40 CFR Part 58, but does not substitute for those requirements, nor do its contents provide a binding determination of compliance with those requirements. The checklist is subject to revision in the future and we welcome comments on its contents and structure.

Key:

White = meets the requirement.

Yellow = requirement is not met, or information is insufficient to make a determination. Action requested in next year’s plan or outside the ANP process. (items listed in Enclosure A)

Green = item requires attention in order to improve next year’s plan (items listed in Enclosure B)

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect?²	Does the information provided³ meet the requirement?⁴	Notes
GENERAL PLAN REQUIREMENTS					
1.	Submit plan by July 1 st	58.10 (a)(1)			
2.	30-day public comment / inspection period ⁵	58.10 (a)(1), 58.10 (a)(2)			
3.	Modifications to SLAMS network – case when we are not approving system modifications	58.10 (a)(2) 58.10 (b)(5) 58.10(e) 58.14		[Yes if correct info was submitted]	
4.	Modifications to SLAMS network – case when we are approving system modifications per 58.14	58.10 (a)(2) 58.10 (b)(5) 58.10(e) 58.14		[Yes if correct info was submitted and 58.14(c) has been met]	
5.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?			[Yes if correct info was submitted]	
6.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)		[Yes if correct info was submitted, (assumes we are not approving the changes in ANP)]	
7.	<i>A plan for establishing a near-road PM_{2.5} monitor (in CBSAs ≥ 2.5 million) by 1/1/2015</i>	58.10(a)(8)(i)			
8.	<i>A plan for establishing a near-road CO monitor (in CBSAs ≥ 2.5 million) by 1/1/2015</i>	58.10(a)(7) 58.13(e)(1)			
9.	<i>NO₂ plan for establishment of 2nd near-road monitor by 1/1/2015</i>	58.10 (a)(5)(iv)	[NA if near-road sites not required]		See attached near-road plan checklist.
10.	Precision/Accuracy reports submitted to AQS	58.16(a);			

¹ Response options: NA (Not Applicable), Yes, No, Incomplete, Incorrect. The responses “Incomplete” and “Incorrect” assume that some information has been provided.

² To the best of our knowledge.

³ Assuming the information is correct

⁴ Response options: NA (Not Applicable) – [reason], Yes, No, Insufficient to Judge.

⁵ The affected state or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
		App A, 1.3 and 5.1.1			
11.	Annual data certification submitted	58.15 App. A 1.3			
12.	SPMs operating an FRM/FEM/ARM that meet Appendix E also meet either Appendix A or an approved alternative.	58.11 (a) (2)			
13.	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. ⁶	58.20(c)			
14.	For agencies that share monitoring responsibilities in an MSA/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)			
GENERAL PARTICULATE MONITORING REQUIREMENTS (PM₁₀, PM_{2.5}, Pb-TSP, Pb-PM₁₀)					
15.	Designation of a primary monitor if there is more than one monitor for a pollutant at a site.	Need to determine collocation			
16.	Distance between collocated monitors (Note: waiver request or the date of previous waiver approval must be included if the distance deviates from requirement.)	App. A 3.2.5.6 and 3.2.6.3			
PM_{2.5} –SPECIFIC MONITORING REQUIREMENTS					
17.	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)		[Yes if correct info was submitted]	
18.	Identification of any PM _{2.5} FEMs and/or ARMs not	58.10 (b)(13)			

⁶ This requirement only applies to monitors that are eligible for comparison to the NAAQS per 40 CFR §§58.11(e) and 58.30.

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
	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 <u>NAAQS-comparable</u> monitor at the required sample frequency.)	58.11 (e)			
19.	Minimum # of monitors for PM _{2.5} [Note 1: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] [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			
20.	Minimum monitoring requirements for continuous PM _{2.5}	App D 4.7.2			
21.	PM _{2.5} collocation	App A 3.2.5			
22.	PM _{2.5} Chemical Speciation requirements for official STN sites	App D 4.7.4			
23.	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)			
24.	Required PM _{2.5} sites represent area-wide air quality	App D 4.7.1(b)			
25.	For PM _{2.5} , at least one site at neighborhood or larger scale in an area of expected maximum concentration	App D 4.7.1(b)(1)			
26.	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)(2)			
27.	States must have at least one PM _{2.5} regional background and one PM _{2.5} regional transport site.	App D 4.7.3			
28.	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 EPA flowchart			
29.	Frequency of flow rate verification for manual PM _{2.5} monitors audit	App A 3.3.2			
30.	Frequency of flow rate verification for automated	App A 3.2.3			

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
	PM _{2.5} monitors audit				
31.	Dates of last two semi-annual flow rate audits for PM _{2.5} monitors	App A, 3.2.4 and 3.3.3			

PM₁₀ –SPECIFIC MONITORING REQUIREMENTS

32.	Minimum # of monitors for PM ₁₀	App D, 4.6 (a) and Table D-4			
33.	Manual PM ₁₀ method collocation (note: continuous PM ₁₀ does not have this requirement)	App A 3.3.1			
34.	Sampling schedule for PM ₁₀	58.10 (b)(4) 58.12(e) App D 4.6			
35.	Frequency of flow rate verification for manual PM ₁₀ monitors audit	App A 3.3.2			
36.	Frequency of flow rate verification for automated PM ₁₀ monitors audit	App A 3.2.3			
37.	Dates of last two semi-annual flow rate audits for PM ₁₀ monitors	App A, 3.2.4 and 3.3.3			

Pb –SPECIFIC MONITORING REQUIREMENTS

38.	Minimum # of monitors for non-NCORE Pb [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.5 58.13(a)			
39.	Pb collocation: for non-NCORE sites	App A 3.3.4.3			
40.	Any source-oriented Pb site for which a waiver has been granted by EPA Regional Administrator	58.10 (b)(10)		[Yes if correct info was submitted]	
41.	Any Pb monitor for which a waiver has been requested or granted by EPA Regional Administrator for use of Pb-PM ₁₀ in lieu of Pb-TSP	58.10 (b)(11)		[Yes if correct info was submitted]	
42.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)		[Yes if correct info was submitted]	
43.	Sampling schedule for Pb	58.10 (b)(4) 58.12(b) App D 4.5			

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
44.	Frequency of one-point flow rate verification for Pb monitors audit	App A 3.3.4.1			
45.	Dates of last two semi-annual flow rate audits for Pb monitors	App A 3.3.4.1			

GENERAL GASEOUS MONITORING REQUIREMENTS					
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46.	Frequency of one-point QC check (gaseous)	App. A 3.2.1			
47.	Date of last Annual Performance Evaluation (gaseous)	App. A 3.2.2			

O₃ –SPECIFIC MONITORING REQUIREMENTS					
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48.	Minimum # of monitors for O ₃ [Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] (see footnote) ⁷	App D, 4.1(a) and Table D-2			
49.	Identification of maximum concentration O ₃ monitor(s)	App D 4.1 (b)			
50.	Sampling season for O ₃ (Note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4) App D, 4.1(i)			

NO₂ –SPECIFIC MONITORING REQUIREMENTS					
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51.	Minimum monitoring requirement for single near-road NO ₂ monitor (in CBSA ≥ 1 million) by 1/1/2014	App D 4.3.2			
52.	Minimum monitoring requirements for area-wide NO ₂ monitor in location of expected highest NO ₂ concentrations representing neighborhood or larger scale (operation required by January 1, 2013)	App D 4.3.3			
53.	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO ₂ (operation required by January 1, 2013)	App D 4.3.4			
54.	Identification of required NO ₂ monitors as either near-road, area-wide, <i>or vulnerable and susceptible population (aka RA40)</i>	58.10 (b)(12)			

⁷ Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements. In addition, ozone monitors that do not meet traffic count/distance requirements to be neighborhood scale (40 CFR 58 Appendix E, Table E-1) cannot be counted towards minimum monitoring requirements.

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
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SO₂ –SPECIFIC MONITORING REQUIREMENTS					
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55.	Minimum monitoring requirements for SO ₂ [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.4			
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NCORE –SPECIFIC MONITORING REQUIREMENTS					
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56.	NCORE site and all required parameters operational	58.10 (a)(3); Pb collocation App. A 3.3.4.3; PM _{10-2.5} minimum monitoring App. D 4.8; PM _{10-2.5} sampling schedule 58.10 (b)(4) 58.12(f) App D 4.8; PM _{10-2.5} collocation App. A 3.3.6	[NA if NCore sites not required]		
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SITE OR MONITOR - SPECIFIC REQUIREMENTS (OFTEN INCLUDED IN DETAILED SITE INFORMATION TABLES)					
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57.	AQS site identification number for each site	58.10 (b)(1)		[Yes if correct info was submitted]	
58.	Location of each site: street address and geographic coordinates	58.10 (b)(2)		[Yes if correct info was submitted]	
59.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)		[Yes if correct info was submitted]	
60.	Parameter occurrence code for each monitor	Needed to determine if other		[Yes if correct info was submitted]	

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
		requirements (e.g., min # and collocation) are met			
61.	Statement of purpose for each monitor	58.10 (a)(1)		[Yes if correct info was submitted]	
62.	Basic monitoring objective for each monitor	App D 1.1 58.10 (b)(6)		[Yes if correct info was submitted]	
63.	Site type for each monitor	App D 1.1.1		[Yes if correct info was submitted]	
64.	Monitor type for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met		[Yes if correct info was submitted]	
65.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D			
66.	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met		[Yes if correct info was submitted]	
67.	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2			
68.	Sampling start date for each monitor	Needed to determine if other requirements		[Yes if correct info was submitted]	

	ANP requirement	Citation within 40 CFR 58	Was the information submitted?¹ If yes, page #s. Flag if incorrect²?	Does the information provided³ meet the requirement?⁴	Notes
		(e.g., min # and collocation) are met			
69.	Distance of monitor from nearest road	App E 6			
70.	Traffic count of nearest road	App E			
71.	Groundcover	App E 3(a)			
72.	Probe height	App E 2			
73.	Distance from supporting structure	App E 2			
74.	Distance from obstructions on roof	App E 4(b)			
75.	Distance from obstructions not on roof	App E 4(a)			
76.	Distance from trees	App E 5			
77.	Distance to furnace or incinerator flue	App E 3(b)			
78.	Unrestricted airflow	App E, 4(a) and 4(b)			
79.	Probe material (NO _x , SO ₂ , O ₃)	App E 9			
80.	Residence time (NO _x , SO ₂ , O ₃)	App E 9			

Public Comments on Annual Network Plan

Were comments submitted to the S/L/T agency during the public comment period?

If no, skip the remaining questions.

If yes:

- Were any of the comments substantive?
 - If yes, which ones?
 - Explain basis for determination if any comments were considered not substantive:
- Did the agency respond to the substantive comments?
 - If yes, was the response adequate?
- Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?
- Are the sections of the annual network plan that received substantive comments approvable after consideration of comments?
 - If yes, provide rationale: