



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3123

AIR & RADIATION
DIVISION

January 25, 2021

Ms. Barbara Trost
Division of Air Quality
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, Alaska 99501

Dear Ms. Trost:

The U.S. Environmental Protection Agency, Region 10 evaluated the Alaska Department of Environmental Conservation's 2020 Annual Monitoring Network Plan (ANP) dated June 26, 2020. This approval letter documents Region 10's findings from the review of this ANP.

Thank you for including details on the following network modifications completed by ADEC in 2019 and 2020:

1. Site shutdown of the State Office Building station (AQS ID: 02-090-0010) in downtown Fairbanks. Discontinuing this site and relocating the PM_{2.5} monitoring to a different site (A-Street, AQS ID: 02-090-0040) was approved in the 2019 ANP response letter. Thank you for updating the Air Quality System (AQS) to reflect the State Office Building site termination date of July 12, 2019.
2. Establishing a new SLAMS PM_{2.5} monitoring station to characterize expected maximum concentration in the Fairbanks portion of the nonattainment area at the A Street location (AQS ID: 02-090-0040). Establishing this monitoring station was approved in the 2019 ANP response letter. Thank you for updating AQS to include this site.
3. Establishing a second Chemical Speciation Network (CSN) Trends Site for PM_{2.5} at the Hurst Rd site (AQS ID: 02-090-0035). This addition was approved in the 2019 ANP response letter. Thank you for updating AQS to include the CSN information for this site.
4. Discontinuation of NO_x monitoring and upgrading gaseous analyzers at the NCore site. We appreciate ADEC keeping us updated on these activities.
5. Updating AQS to reflect the discontinuation of the Palmer SPM monitoring site (AQS ID: 02-170-0012) on July 25, 2019. The shutdown of this site was discussed in the 2019 ANP response letter.

Alaska's 2020 ANP did not include any network modifications that require EPA approval. We appreciate the inclusion of plans to establish a replacement site for the Butte PM_{2.5} (SLAMS) and PM₁₀ (SPM) monitoring. Your plan of conducting a saturation study followed by parallel monitoring for at least 12 months will improve confidence in establishing a replacement site. Please notify us of any updates related to finding a replacement site for the Butte monitoring site.

Based on our review of the ANP, we did not identify any part of Alaska's ambient air monitoring network that does not meet the minimum monitoring requirements set out in 40 CFR 58. The enclosed Annual Monitoring Network Plan Checklist is the checklist EPA used to review your plan for overall

items that are required to be included in the ANP along with our assessment of whether the plan submitted by your agency addresses those requirements. All comments conveyed via this letter and the enclosed checklist should be addressed in next year's annual monitoring network plan via corrections or addition of information to the plan. Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information, as described, does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 10 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices.

Region 10 approves the State of Alaska's 2020 ANP. We appreciate the timeliness of the ANP submission, as well as all the work ADEC does to protect the quality of Alaska's air, and we look forward to our continued collaboration. If you have any questions about our approval of the ANP, please contact me at (206) 553-0985 or Sarah Waldo at (206) 553-1504.

Sincerely,

Debra Suzuki, Manager
Air Planning, State/Tribal Coordination Branch

Enclosure: Annual Monitoring Network Plan Checklist

Region 10 ANNUAL AIR MONITORING NETWORK PLAN CHECKLIST

Year: 2020

Agency: Alaska Department of Environmental Conservation (ADEC)

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 10 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, 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:

Highlight Color:	Meaning:
White/no highlight	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.
Turquoise	item requires attention to improve next year's plan

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If yes, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
GENERAL PLAN REQUIREMENTS					
1.	Submit plan by July 1 st	58.10 (a)(1)	Y	Y	Submitted June 26 th
2.	30-day public comment / inspection period	58.10 (a)(1); 58.10 (c)	Y	Y	The submission material includes the notice of request for comments; no comments were received
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)	Y; Appendices	Insufficient to judge	I could not find statements that the QA requirements of App's A & B were met. Please add this to next year's ANP.
4.	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	N/A		Alaska's 2020 ANP did not include any proposed system modifications for the upcoming year.
5.	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	Y; Section 4: Network Modifications completed in 2019 and 2020, p 34	Y, but could be improved	Alaska's 2020 ANP did not include any proposed system modifications for the upcoming year. Some previous modifications were not clearly and consistently presented, such as the status of monitoring sites that were discontinued >1 year but <3 years ago (e.g. Palmer).
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?	N/A	Incomplete	N/A	ADEC should provide site shutdown approvals as appendices to the ANP, rather than providing links. Many of the links in the ANP result in 404 errors.

¹ Unless otherwise noted.

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

³ Assuming the information is correct.

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

7.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	Y, p. 35	Y	Planning to relocate Butte site. ADEC has capacity/time to run a test site as an SPM in parallel with the Butte site for 12 months before discontinuing Butte
8.	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. ⁵	58.11 (a)(2)	N	Incomplete	Please add this to next year's plan.
9.	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)	Y; Tables 3-7, 3-8, 3-9, and 3-10; Table E-1	Needs clarification	SPMs for PM10 and/or PM2.5 are operated at Bethel, Laurel, and Butte. For some sites, App A requirements were not met. This should be clarified in future ANPs. The A Street monitor in Fairbanks is not eligible for NAAQS comparisons; monitoring started 11/29/2018
10.	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)	N/A		ADEC does not share monitoring responsibilities

GENERAL PARTICULATE MONITORING REQUIREMENTS (PM₁₀, PM_{2.5}, Pb-TSP, Pb-PM₁₀)

11.	Designation of a primary monitor if there is more than one monitor for a pollutant at a site.	App. A 3.2.3	Y; Table 3-17	Y	
12.	Distance between QA collocated monitors. For low volume PM instruments (flow rate < 200 liters/minute) > 1 m. For high volume PM instruments (flow rate > 200 liters/minute) > 2m.	App. A 3.2.3.4 (c) and 3.3.4.2 (c)	N	Insufficient	Please add this information to next year's ANP.

⁵ 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.

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

PM_{2.5} -SPECIFIC MONITORING REQUIREMENTS

13.	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		The only change in the PM _{2.5} monitoring network relates to the Butte site, which is not violating.
14.	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 <u>NAAQS</u> -comparable monitor at the required sample frequency.]	58.10 (b)(13) 58.11 (e)	Y	Y	Table E-1 presents PM _{2.5} design values, with annotation noting if a value is not eligible for comparison with the NAAQS due to data completeness or non-FEM status.
15.	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	Y	Y	No MSAs in AK have a population >500,000, thus the maximum minimum number of monitors required in any MSA is 1. ADEC is meeting this requirement.
16.	Requirements for continuous PM _{2.5} monitoring (number of monitors and collocation)	App. D 4.7.2	Y	Y	All MSAs have >1 continuous monitor.
17.	FRM/FEM/ ARM PM _{2.5} QA collocation	App. A 3.2.3	Y, Table 3-17	Y	
18.	PM _{2.5} Chemical Speciation requirements for official STN sites	App. D 4.7.4	Y, Table 3-8	Y	CSN is collocated with NCore
19.	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)	Y, Table E-1		Table E-1 presents PM _{2.5} design values, with annotation noting if a value is not eligible for comparison with the NAAQS due to data completeness or non-FEM status.
20.	Required PM _{2.5} sites represent area-wide air quality	App. D 4.7.1(b)	Y, Tables 3-11, 3-12, 3-13, 3-14, 3-15	Y	
21.	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)	Y, Tables 3-11, 3-12, 3-13, 3-14, 3-15	Y	

22.	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)	Y, Tables 3-11, 3-12, 3-13, 3-14, 3-15	Y	
23.	States must have at least one PM _{2.5} regional background and one PM _{2.5} regional transport site.	App. D 4.7.3	Y, Table 3-11	Y	
24.	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	Y; tables 3-7, 3-8; 3-9; 3-10	Y	All primary FRM are 1:1

PM₁₀ -SPECIFIC MONITORING REQUIREMENTS

25.	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	Y: Tables 3-16; E5	Y	The minimum number of PM10 monitors is met whether Anchorage is in the "high" PM10 category (PM10 levels 20% higher than the NAAQS) or the "medium" category (levels >80% of NAAQS), but the ANP is not clear on what category the Anchorage MSA falls into. Please clarify the Anchorage PM10 category in next year's ANP.
26.	Manual PM ₁₀ method collocation (note: continuous PM ₁₀ does not have this requirement)	App. A 3.3.4	Y, Table 3-17	Y	
27.	Sampling schedule for PM ₁₀	58.10 (b)(4); 58.12(e); App. D 4.6	Y; tables 3-7, 3-8, 3-9, 3-10	Y	Please correct Table 3-8 which lists the sampling frequency of the primary PM10 monitor at the NCore site as 1:3

Pb -SPECIFIC MONITORING REQUIREMENTS

28.	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	Y; Section 3.1.1	Y	Waiver for only source >0.5 tpy. Waivers should be included as appendices as some links resulted in 404 errors.
29.	Pb collocation: for non-NCore sites	App A 3.4.4 and 3.4.5	N/A	N/A	

30.	Any source-oriented Pb site for which a waiver has been granted by EPA Regional Administrator	58.10 (b)(10)	Y	N	Section 3.5.1 discusses the lead source-oriented monitoring waiver for the Red Dog Mine. ADEC should provide the waiver approval letter as an appendix to the ANP, rather than a link.
31.	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)	N/A		AK does not have any Pb monitoring requirements
32.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	N/A		AK does not have any Pb monitoring requirements
33.	Sampling schedule for Pb	58.10 (b)(4); 58.12(b); App A 3.4.4.2 (c) and 3.4.5.3 (c)	N/A		AK does not have any Pb monitoring requirements
34.	Frequency of flow rate verification for Pb monitors audit	App A 3.4.1 and 3.4.2	N/A		AK does not have any Pb monitoring requirements
35.	Dates of two semi-annual flow rate audits conducted in the previous CY for Pb monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App A 3.4.3	N/A		AK does not have any Pb monitoring requirements

O₃ -SPECIFIC MONITORING REQUIREMENTS

36.	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	Y; Table 3-2		The only AK MSA with an O ₃ monitoring requirement is Anchorage, which has a waiver. AK only monitors ozone at the NCore site. Please include waivers as appendices in the next ANP, as some links resulted in 404 errors.
-----	--	----------------------------------	--------------	--	---

37.	Identification of maximum concentration O ₃ site(s)	App D 4.1 (b)	N/A		AK only monitors ozone at the NCore site.
38.	Sampling season for O ₃ (Note: Waivers must be renewed annually. EPA expects agencies to submit re-evaluations of the relevant data each year with the ANP. EPA will then respond as part of the ANP response.)	58.10 (b)(4); App D 4.1(i)	N/A		AK only monitors ozone at the NCore site. Should be specified that this is year-round.
39.	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)	N/A		

NO₂ -SPECIFIC MONITORING REQUIREMENTS

40.	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	N/A		This requirement does not apply to Alaska, as the state does not have any CBSAs with populations >1,000,000
41.	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO ₂	App D 4.3.4	N/A		
42.	Identification of required NO ₂ monitors as either near-road, area-wide, or vulnerable and susceptible population (aka RA40)	58.10 (b)(12)	N/A		

NEAR ROADWAY - SPECIFIC MONITORING REQUIREMENTS

In CBSAs ≥ 2.5 million, the following near-roadway minimum monitoring requirements apply:

43.	Two NO ₂ monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	N/A		AK does not have any CBSAs with populations >2.5M
44.	One CO monitor	App. D 4.2.1(a); 58.13(e)(2)	N/A		
45.	One PM _{2.5} monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	N/A		

In CBSAs ≥ 1 million and AADT ≥ 250K, the following near-roadway minimum monitoring requirements apply:

46.	Two NO ₂ monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	N/A		
47.	One CO monitor	App. D 4.2.1(a); 58.13(e)(2)	N/A		
48.	One PM _{2.5} monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	N/A		

In CBSAs ≥ 1 million and ≤ 2.5 million AND AADT < 250K, the following near-roadway minimum monitoring requirements apply:

49.	One NO ₂ monitor	App. D 4.3.2(a); 58.13(c)(3)	N/A		
50.	One CO monitor	App. D 4.2.1(a); 58.13(e)(2)	N/A		
51.	One PM _{2.5} monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	N/A		

SO₂ -SPECIFIC MONITORING REQUIREMENTS

52.	Minimum monitoring requirements for SO ₂ based on PWEI 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	N/A		AK does not have any CBSAs with a Pop weighted EI >5,000
-----	--	-----------	-----	--	--

NCORE -SPECIFIC MONITORING REQUIREMENTS

53.	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)	Y; Table 3-8	Y	Table 3-8 lists AQS monitor start dates that range from 2011 to 2012 Includes sampling schedules, including for PM10-2.5
-----	---	-------------	--------------	---	---

54.	A plan for making Photochemical Assessment Monitoring Stations (PAMS) measurements, if applicable. The plan shall provide for the required PAMS measurements to begin by June 1, 2021.	58.10 (a)(10); 58.13 (h)	N/A		AK is not required to have a PAMS site.
-----	--	-----------------------------	-----	--	---

SITE OR MONITOR - SPECIFIC REQUIREMENTS (OFTEN INCLUDED IN DETAILED SITE INFORMATION TABLES)					
---	--	--	--	--	--

55.	AQS site identification number for each site	58.10 (b)(1)	Y; table 3-3, 3-11	Y	
56.	Location of each site: street address and geographic coordinates	58.10 (b)(2)	Y; table 3-3	Y	
57.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	Y, Table 3-10, page 38	Incomplete	The monitors within the Fairbanks, Anchorage and Juneau CBSAs are given in the table on p 38. The area represented by the Bethel monitoring site is not provided. Recommend adding the county or micropolitan SA to Table 3-10.
58.	Parameter occurrence code (POC) for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y Tables 3-12, 3-13, 3-14, 3-15	N	POC system is inconsistent: - Butte collocated inst. Has POC 1
59.	Basic monitoring objective for each monitor	App D 1.1; 58.10 (b)(6)	Y; Tables 3-12, 3-13, 3-14, 3-15 provide both objective and type	Y	There is some ambiguity about monitoring objective, purpose, scale, type, and designation. See endnote for my clarification.
60.	Site type (designation) for each monitor (e.g. SLAMS, SPM)	App D 1.1.1	Y; Tables 3-7; 3-8; 3-9; 3-10	N	Several of the monitors have incorrect/inconsistent SLAMS/SPM designation: - Non-FEM BAM1020 (SCC) at the NCore site should be designated SPM Is the Parkgate site SPM or SLAMS?
61.	Monitor type for each monitor, and Network Affiliation(s) as appropriate	Needed to determine if other	Y; Tables 3-12, 3-13, 3-14, 3-15	Y	There is some ambiguity about monitoring objective, purpose, scale, type, and designation.

		requirements (e.g., min # and collocation) are met	provide both objective and type		See endnote for clarification.
62.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	Y; Tables 3-4 (CO), 3-5 (PM), 3-6 (NCore)	N	Minor inconsistencies, e.g. the 10m met monitor at the NCore site designated micro
63.	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y; Tables 3-7, 3-8, 3-9, 3-10	Y	
64.	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2	Y; Tables 3-7, 3-8, 3-9, 3-10 include AQS method codes and equipment		Method codes should be reviewed for consistency
65.	Sampling start date for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y, Tables 3-7, 3-8, 3-9, 3-10	Y	
66.	Distance of monitor from nearest road	App E 6	Y, Table B-3	Unclear.	Minimum distance in CFR 58 App E Table E-2 is 10m; the Garden site is 7.3 m from road. Please address this in next year's ANP.
67.	Traffic count of nearest road	App E	N/A		This is a requirement for NO2
68.	Groundcover	App E 3(a)	Y	N	The Butte and Bethel sites are on graveled areas. Butte has a waiver; Bethel is in a holding pattern due to COVID. Bethel is an SPM.
69.	Probe height	App E 2	Y, ANP App B	N	What is the status of the NOy probe height?

70.	Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	App E 2	Y	Y	Tables B-1 thru B-3 state "Criteria met" for horizontal and vertical placement
71.	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)	Y	Y	
72.	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)	Y, Table B-3	Y	
73.	Distance from the drip line of closest tree(s)	App E 5	N	N	Why is spacing from trees "NA" in Table B-3?
74.	Distance to furnace or incinerator flue	App E 3(b)	Y, Table B-3	Y	
75.	Unrestricted airflow (expressed as degrees around probe/inlet or percentage of monitoring path)	App E, 4(a) and 4(b)	Y	Y	
76.	Probe material (NO/NO ₂ /NO _y , SO ₂ , O ₃ ; For PAMS: VOCs, Carbonyls)	App E 9	Y, Table B-3	Y	Table B-3 states "Glass w/ FEP sample line". App E requires borosilicate glass and FEP teflon. Please clarify these materials in next year's ANP.
77.	Residence time (NO/NO ₂ /NO _y , SO ₂ , O ₃ ; For PAMS: VOCs, Carbonyls)	App E 9	Y, Table B-3	Y	

CFR Definitions:

- **Monitoring Objective** can be one of three things: 1) Provide air pollution data to the general public in a timely manner; 2) Support compliance with ambient air quality standard and emission strategy development; or 3) Support air pollution research studies
 - o The ADEC ANP terms this "Monitoring Purpose"
- **Monitoring Site Types** are for the purpose of supporting the monitoring objectives, and there are six general types: 1) highest concentration; 2) typical concentrations in areas of high population density (aka population exposure); 3) source oriented; 4) background; 5) transport; 6) visibility/welfare
 - o The ADEC ANP terms this "AQS Monitoring Objective"
- **Spatial Scale**
- **Monitor designation:** can refer to *both* whether a monitor is FRM/FEM, and whether it is SLAMS or SPM. Further confusion: NCore, PAMS, and CSN are types of SLAMS
 - o ADEC ANP refers to SLAMS/SPM/NCore status as "monitor designation"
 - o The ADEC ANP does not explicitly specify which monitors are FRM/FEM beyond providing the method code