



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

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OFFICE OF  
AIR, WASTE AND TOXICS

October 13, 2010

Ms. Barbara Trost  
Air and Water Quality Division  
Alaska Department of Environmental Conservation  
555 Cordova Street  
Anchorage, AK 99501-2617

Dear Ms. Trost:

We have evaluated the 2010 Alaska Ambient Air Monitoring Network Plan, which describes the Alaska monitoring network for 2010-11. The major change to the EPA-funded portion of the AK monitoring network is the addition of the Fairbanks NCore site, which will begin operation on January 1, 2011. The parameters that must be monitored at this site, and reported to AQS, are specified in the enclosed table.

Federal Reference Method (FRM) and Federal Equivalent Method (FEM) monitoring data from the following sites, which are designated as Special Purpose Monitors, must be reported to EPA's Air Quality System (AQS). We understand that data quality at these sites has been questionable or incomplete, and that Fairbanks North Star Borough and ADEC are short staffed at this time. However, these data must be reported to AQS, with appropriate data quality flags, as soon as possible. These sites are:

1. Fairbanks/TAC
2. Fairbanks/North Pole
3. Palmer - AQS ID 02-170-0012
4. Wasilla - AQS ID 02-170-0013

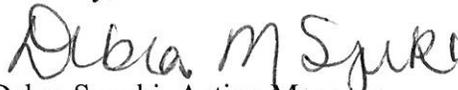
The following monitors are designated "core" monitors because they are either: 1) required by 40 CFR Part 58, Appendix D, 2) have a design value near or above the new PM<sub>2.5</sub> 24-hour standard of 35ug/m<sup>3</sup>, or 3) they are essential monitoring parameters at NCore sites:

1. PM<sub>2.5</sub> FRMs (or Approved Regional Method):
  - a) Fairbanks (primary and secondary)
  - b) Juneau
  - c) Butte
2. PM<sub>2.5</sub> speciation and precursor gas monitoring at the proposed Fairbanks NCore site.

"Core" monitors are those monitors in the network that must be operated with available PM<sub>2.5</sub> monitoring funds. The "non-core" PM<sub>2.5</sub> monitors in the State's network can be operated at ADEC's discretion with any remaining federal funds or State funds.

If you have any questions about our approval of the Alaska monitoring network, please contact Keith Rose at (206) 553-1949.

Sincerely,



Debra Suzuki, Acting Manager  
State and Tribal Program Unit

Enclosure

cc: Chris Hall, OEA

Keith Rose, OAWT

Enclosure

Measurement Category	Measurement	Sample Frequency	Urban NCore – What methods/programs can be used to meet the Requirement?	Rural NCore – What methods/programs can be used to meet the Requirement?
Particles	PM <sub>2.5</sub> particle mass using a continuous method	Continuous	FEM, ARM, or correlated continuous method reporting to parameter code 88502	Same
	PM <sub>2.5</sub> particle mass using integrated/filter-based samplers	Must be 1:3	Must be an FRM or filter-based FEM	FRM, filter-based FEM, CSN or <b>IMPROVE Teflon channel (gravimetric mass)</b>
	Speciated PM <sub>2.5</sub>	Must be at least 1:3	CSN mostly, but can also be IMPROVE	IMPROVE mostly, but can also be CSN
	PM <sub>10-2.5</sub> Mass <sup>1</sup>	Must be 1:3	Must be a FRM or FEM. Can be either filter-based or continuous	Same.
	Speciated PM <sub>10-2.5</sub>	Methods for PM <sub>10-2.5</sub> speciation are in development and will not be implemented at this time		
Lead (proposed for NCore)	NCore stations are expected to use lead in PM <sub>10</sub> <sup>1</sup>	Must be at least 1:6	Low-volume PM <sub>10c</sub> sampler	EPA took comment on not requiring lead at rural NCore; however, if it is required sampling would be conducted the same way as urban NCore stations.
Gases	Ozone	Continuous	FEM is expected since the FRM is not used	Same
	SO <sub>2</sub>		See Technical Assistance Document (TAD) for specifications. Urban sites are largely expected to use high sensitivity versions of an FRM or FEM since data will be compared to NAAQS	See TAD for specifications. Since high-sensitivity versions of FRM's/FEM's are commercially available for CO and SO <sub>2</sub> , these methods should be utilized. In a few cases agencies may have acquired pre-FRM/FEM versions of these monitors. For those cases where the site is not intended to be compared to the NAAQS, pre-FRM/FEM versions of high sensitivity monitors may be used, so long as they meet performance specifications described in the TAD.
	CO			
	NO/NO <sub>y</sub>		See Technical	Same

<sup>1</sup> A strategy for national collocation of PM<sub>10-2.5</sub> mass and lead in PM<sub>10c</sub> is being developed so that each agency may not have to provide for having a collocated sampler so long as the goal of 15% collocation is met across all monitoring agencies for each measurement method.

			Assistance Document for specifications. FRM/FEM does not exist	
Meteorology	Wind Speed	Continuous	Requirements on the type of meteorology methods are not specified	Same
	Wind Direction			
	Relative Humidity			
	Ambient Temperature			