

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY RESEARCH TRIANGLE PARK, NC 27711

November 10, 2014

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

MEMORANDUM

SUBJECT: Final Results of PM2.5 Chemical Speciation Network Assessment

FROM: Richard A. Wayland, Director Richal A. Wayfanl

Air Quality Assessment Division (C304-02)

TO: Air Division Directors

This is a notification to the Air Division Directors concerning the final results of the PM_{2.5} Chemical Speciation Network (CSN) assessment process. This nearly year-long process undertook a quantitative evaluation of the network based on each site's contribution to the support of objectives including SIP development, health studies, trends analysis, urban versus rural increments, and regional haze. The goal of the assessment was to create a financially sustainable network that fully supports existing priorities, leverages other networks such as IMPROVE and NCore, and supports development of new technologies for potential future integration into CSN.

The CSN Assessment Team was comprised of members from OAQPS, Regional Offices, and NACAA. Periodic updates have been provided to the AA's office, during ADD meetings, through regular conference calls with Monitoring APM's and their staff, and through periodic discussions with NACAA, AAPCA, and HEI. A comprehensive presentation about the assessment was given at the recent National Ambient Air Monitoring Conference this past August and is available online at:

http://www.epa.gov/ttn/amtic/files/2014conference/tuelandis.pdf.

As explained in the attachment, the final recommendations of the assessment include defunding of 42 sites effective at the end of the contract period in late January, 2015, elimination of the CSN PM_{2.5} mass measurement, and minor changes to sampling frequency, carbon blank frequency, and shipping procedures.

We are optimistic that the revised CSN will be sustainable for at least another five years. We will also continue to work with your staff as well as stakeholders with state agencies and health research organizations to continue the dialogue on appropriate investments needed to maintain the efficiency and technical excellence of the network moving forward.

I would like to thank all of you for the participation and input from your monitoring staff in this effort and if you have any questions on the results of the assessment, please contact Lewis Weinstock of my staff at (919) 541-3661 or Weinstock.lewis@epa.gov.

Attachments (1)

Final Recommendations (November 2014)

1 Defund 42 "Low Value" Sites 2 Eliminate CSN PM_{2.5} Mass (Oct. 2014) 3 Reduce Sample Frequency (3 sites)

4 Reduce Carbon Blank Frequency 5 Reduce Icepacks (all but 4 sites)

What are the final changes being made to the number of sites in the CSN?

A total of 42 sites will no longer be funded for laboratory analysis through the CSN national contract out of the current 189 sites (a complete list of the defunded sites is available at the end of this document). The CSN will continue with 147 sites beginning in 2015. These sites are not being shut down, rather the CSN measurements will be discontinued at the 42 sites.

What other changes are being made?

The CSN PM_{2.5} mass measurement is being eliminated at nearly all sites since PM_{2.5} Federal Reference Method (FRM) samplers are collocated and provide this data (EPA will provide the funds to add FRMs to those few sites that require them). Sampling frequency is being reduced to 1:6 at 3 sites (Arnold West, MO; Wylam, AL; Albany, NY). Other cost savings measures include the reduction in carbon blank collection frequency (all sites) and reduction in the number of icepacks in routine shipments (all but 4 sites) to reduce weight. These changes are all being made in close coordination with state partners.

When will these changes take place?

The last CSN mass measurement took place on September 29, 2014. The other changes (including site defunding) will be implemented at the end of the contract in late January, 2015.

Will the CSN samplers be removed from defunded sites?

No. This equipment will remain with the monitoring agencies.

Are there any options for continued sampling at the defunded sites?

Yes. Monitoring agencies may use funds such as PM_{2.5} 103 direct award funds to pay for lab analysis costs. We know of at least five sites¹ (out of the defunded 42 sites) that plan to continue monitoring in this manner. Regional Office and OAQPS contacts should be informed as soon as possible if this option is being considered.

¹ Chester, NJ; Camden, NJ; Chesterfield, SC; Douglas, GA; Rochester, Minnesota

How will the operators of defunded sites be informed?

Site operators will receive written notification along with their regular shipment of sampling filters prior to discontinuation in January 2015. This notification will inform them of the decision to defund their sites later in January at the end of the contract period.

List of defunded sites:

34-007-0002 Camden NJ 2 39.934446 -75.125291 34-027-3001 Chester NJ 2 40.787628 -74.676301 10-001-003 Dover DE 3 39.155000 -75.518056 42-011-0011 Reading Airport PA 3 40.383350 -75.968000 42-047-0100 State College PA 3 40.381389 -77.877028 42-043-0401 Harrisburg PA 3 40.245000 -76.844722 42-049-0003 Erie PA 3 42.141750 -80.038611 42-069-2006 Scranton PA 3 41.442778 -75.623056 42-133-0008 York PA 3 39.65278 -76.69944 41-039-1005 South Charleston Library WV 3 38.366183 -81.693717 01-089-0014 Huntsville Old Airport AL 4 32.407120 -86.256367 12-103-0026 Skyview (Pinellas County) FL 4 27.850348 -82.714465	AQS Site ID	Site Name	State	Region	Latitude	Longitude
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47-099-0002 Lawrence County TN 4 35.116223 -87.470010 18-039-0008 Elkhart Prarie Street IN 5 41.656888 -85.968411 26-113-0001 Houghton Lake MI 5 44.310555 -84.891865 26-115-0006 Sterling Park MI 5 41.923582 -83.345730 26-147-0005 Port Huron MI 5 42.953336 -82.456229 27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	47-037-0023	Lockeland School	TN	4	36.176326	-86.738902
18-039-0008 Elkhart Prarie Street IN 5 41.656888 -85.968411 26-113-0001 Houghton Lake MI 5 44.310555 -84.891865 26-115-0006 Sterling Park MI 5 41.923582 -83.345730 26-147-0005 Port Huron MI 5 42.953336 -82.456229 27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	47-065-4002	UTC	TN	4	35.050928	-85.292975
26-113-0001 Houghton Lake MI 5 44.310555 -84.891865 26-115-0006 Sterling Park MI 5 41.923582 -83.345730 26-147-0005 Port Huron MI 5 42.953336 -82.456229 27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	47-099-0002	Lawrence County	TN	4	35.116223	-87.470010
26-115-0006 Sterling Park MI 5 41.923582 -83.345730 26-147-0005 Port Huron MI 5 42.953336 -82.456229 27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	18-039-0008	Elkhart Prarie Street	IN	5	41.656888	-85.968411
26-147-0005 Port Huron MI 5 42.953336 -82.456229 27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	26-113-0001	Houghton Lake	MI	5	44.310555	-84.891865
27-109-5008 Rochester MN 5 43.996908 -92.450366 39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	26-115-0006	Sterling Park	МІ	5	41.923582	-83.345730
39-049-0081 Columbus - Maple Canyon OH 5 40.087700 -82.959773	26-147-0005	Port Huron	MI	5	42.953336	-82.456229
	27-109-5008	Rochester	MN	. 5	43.996908	-92.450366
39-087-0012 ODOT Garage OH 5 38.508114 -82.659301	39-049-0081	Columbus - Maple Canyon	ОН	5	40.087700	-82.959773
	39-087-0012	ODOT Garage	ОН	5	38.508114	-82.659301

PM_{2.5} Chemical Speciation Network – Q&As about the Final Assessment Results

AQS Site ID	Site Name	State	Region	Latitude	Longitude
39-095-0026	Toledo Airport	ОН	5	41.620633	-83.642250
39-099-0014	Head Start	ОН	5	41.095938	-80.658467
55-133-0027	Waukesha, Cleveland Ave. site	WI	5	43.020075	-88.215070
19-113-0040	Linn County Health	IA	7	41.976770	-91.687660
19-153-0030	Public Health Building	IA	7	41.603159	-93.643118
29-047-0005	Liberty	МО	. 7	39.303090	-94.376623
29-186-0005	Bonne Terre	МО	7	37,900840	-90,423880
53-011-0023	VANNEVAŅ	WA	10	45.649870	-122.590100