

Tribal Air Monitoring Support Center

Air Quality Filter Weighing Service Concept Paper

January 2015

This document will provide guidance on how the Tribal Air Monitoring Support (TAMS) Center air quality filter weighing service will be implemented. The TAMS Steering Committee (SC) developed this concept paper with several objectives in mind:

1. Send a clear message to the three TAMS Center partners; Institute for Tribal Environmental Professionals (ITEP), the U.S. Environmental Protection Agency (EPA) and Tribal air quality programs across the nation, that gravimetric lab services for filter based air quality monitoring is needed and important.
2. Define the steps necessary to rebuild the service.
3. Set the criteria for Tribal programs to utilize the service.
4. Initiate an application and approval process.
5. Provide the air quality filter gravimetric lab services until new technology or methods become available that supersedes this need.

Background

The Tribal Air Monitoring Support (TAMS) Center was formed in 2000 through a cooperative agreement between the U.S. EPA, the Northern Arizona University (NAU) Institute for Tribal Environmental Professionals (ITEP) and the tribes with the mission of developing tribal capacity to assess, understand, and prevent environmental impacts that adversely affect health, culture, and natural resources. Assisting tribes with their monitoring needs has always been the integral component of the TAMS Center mission. In 2002 under the guidance from the SC, the TAMS Center established a gravimetric laboratory capable of weighing Particulate Matter (PM) filters. The intent of the TAMS Gravimetric Laboratory was to provide temporary weighing support until a tribe was able to identify a lab to replace the service. Initially five (5) tribes signed on to use the service. This number has fluctuated throughout the years; in 2013 there were nine (9) tribes using the lab, which represents about 2,250 filters per year (f/yr.). Presently six (6) tribes continue to utilize the service with a definitive stop date in 2016.



The first gravimetric lab guidance document was developed by the SC and adopted in March 2010. Because of the popularity, the SC felt that rules for using the service should be adopted and implemented. The SC wanted to use the guidelines to provide an objective and equitable solution to future TAMS lab capacity issues. The capacity was set at 18 tribes or 4,500 filters per year. Seven major tenets were defined to guarantee the capacity would not be exceeded. These tenets remain viable

today and are utilized in the guidance document with minor revisions. Revisions in 2013 were adopted by the SC that reflected the reorganization of the EPA Radiation and Indoor Environments National Laboratory (RIENL) and provided for the use of a commercial lab to span the time the EPA lab could not provide the service.

The RIENL reorganization occurred at the end of January 2013 with a name change to the National Center for Radiation and Field Operation (NCRFO) with two entirely new Centers established: the Center for Planning and Training (CPT) and the Center for Radiation Preparedness and Response (CRPR). As a part of the reorganization, the TAMS Center gravimetric laboratory services were discontinued permanently.

On September 18, 2014, the TAMS gravimetric laboratory stopped weighing filters for tribal customers because of the reorganization at the National Center for Radiation and Field Operations. Through advanced planning, the TAMS Center avoided interruption to the six tribes utilizing the service. Until the Request for Proposal (RFP) for a commercial laboratory is finalized by the EPA and the contract is awarded, the current six tribal programs will continue to receive gravimetric laboratory service from the RTI International Laboratory at Research Triangle Park, NC. The service will continue to be provided at no cost to the tribes. It is expected that a gravimetric laboratory service contract will be awarded to a commercial laboratory during the spring of 2015.

The TAMS Co-Directors are intensely engaged with the filter weighing process by communicating directly with the RTI lab and the tribes when questions concerning process and procedures arise. The TAMS Co-Directors will continue to help the tribes understand issues that are triggering flags on the samples serviced by the RTI International Laboratory.

To better understand the need for the gravimetric lab filter weighing, the SC gathered tribal input by drafting a Tribal Air Quality Program Technical Services Needs Assessment that was sent to tribal professionals for their feedback. Results of this assessment are included in the TAMS Technical Needs Assessment Report and Implementation Plan. While additional important priorities for the TAMS Center were determined, the assessment clearly indicated the need, and request from Tribes for a filter weighing service.

The interim filter weighing service costs \$64.00 per filter and projects out to a yearly need of \$120,000. This amount allows for 1,875 filters to be processed per year and is the minimum required for the service. After the RFP process and the award of a contract, the price per filter may decrease or increase, depending on proposals.

Many Tribal programs do not have the funding or access to newer technology that does not utilize filters. These programs rely on older, outdated and many times surplus equipment from state agencies, air authorities or the TAMS equipment loan service. Currently the majority of the equipment loan program monitors are filter based and ready for deployment. The monitors are not being requested because of the lack of a filter weighing service.

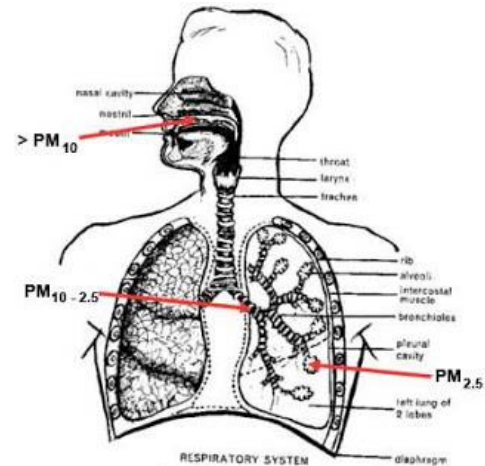
At the fall 2014 in-person meeting, the SC decided by consensus to take action that would reestablish the gravimetric laboratory service for filter weighing to the TAMS Center. The decision was made with full knowledge that EPA budgetary constraints will be part of the discussion and lack of funding may be used as an argument for not restarting the program. The SC took a fundamentally different approach by not limiting the TAMS Centers possibilities based on perceived funding limits. For this reason, gravimetric laboratory service will be included in the TAMS Technical Needs Assessment Report and

Implementation Plan. This allows the SC and TAMS staff to move ideas and projects forward based on the needs indicated by Tribal programs across the nation.

Steps to Rebuild the Service

The following outline represents the SC concept of how a filter weighing gravimetric lab service can be re-established.

1. Draft an Air Quality Filter Weighing Service Guidance Document with service tenets and application process
2. Discuss the need and guidance document with TAMS partners
3. Finalize the Air Quality Filter Weighing Service Guidance
4. Develop an RFP and a listing of labs capable and willing to participate in service and select one
5. Format standard SOPs for filter handling that can be adopted by Tribal air programs
6. Format standard QAPPs for filter based air quality monitoring that can be adopted by Tribal air programs
7. Seek means to fund service
8. Advertise service to Tribal air quality programs
9. Gather applications and seek recommendations from the SC
10. Monitor use and effectiveness of service
11. Review service on a regular basis and update as needed



The Tribal Air Monitoring Support Center Steering Committee approved this document by consensus on January 21, 2015.