The EPA Forum on Environmental Measurements: STAY CALM AND CARRY ON

As described in the Federal Register on April 29, 2013,the US Environmental Protection Agency's (EPA's or the Agency's) Forum on Environmental Measurements (FEM) is implementing a policy requiring organizations generating or using environmental data under certain Agency-funded assistance agreements to submit documentation of their competency prior to award of the agreement. If that is not practicable, submission should be made prior to beginning any work involving the generation or use of environmental data under the agreement.

When EPA first announced this policy, there was much misunderstanding and dismay about what appeared to be yet another set of paperwork and requirements, which tribes must complete. Even the title, "Proof of Competency," has an unfortunate ring to it! After talking with the Senior Advisor for the policy, Lara Phelps, we learned, in fact, this policy is not imposing any additional burdens or paperwork, and is merely a restatement and reminder of existing policy, which has been in place for over ten years. Everyone who has taken Institute for Tribal Environmental Professionals (ITEP) courses, or worked on their quality assurance project plans (QAPPs) with us, knows we have always stressed quality assurance (QA) from a common sense perspective, and the necessity of an approved QAPP that actually reflects the real work you do. An approvable QAPP includes documentation of the organization, personnel training, audits, data management, and the schedule and specific content of regular reports to EPA.

A 'Question & Answer' (Q&A) document has been assembled from webinar discussions about the policy (available at http://www.epa.gov/fem/lab_comp.htm) and one answer states: "The policy is not intended to be burdensome or to require actions beyond what already was being done to ensure competency. The policy is intended as a check to ensure that entities are in fact doing what they have promised to do. Quality systems and Quality Management Plans (QMPs) already were in use; this policy is designed to ensure that they are being followed and updated as needed. Systems are to be in place up front and then followed at regular reporting intervals." In other words, keep calm and carry on, take a look at a few areas that could be improved (see below), add a few items to your regular communication with EPA, but if you have an approved QAPP and are doing what it describes, you just need to carry on and continue to follow it.

So, why was this policy issued? Public information is available on what air monitoring agencies have approved QAPPs, and the results are surprising. As it turns out, there are agencies, including many outside the tribal environmental community, not adhering to the EPA (and common sense, as well as international ISO guidance) policy for keeping updated and approved QAPPs that include all the required elements such as training and audits. The EPA updates a list of agencies with approved QAPPs, which is available on the EPA Air Quality Systems (AQS) website at https://aqs.epa.gov/aqsweb/codes/data/QAPP.html. The link to this list was posted in the informative QA Eye newsletter published by Mike Papp in the Office of Air Quality Planning and Standards (OAQPS). Please sign up to get these newsletters, as they contain vital information http://www.epa.gov/ttn/amtic/qanews.html that you will find useful. As you can see from the list, there are many agencies operating without approved QAPPs, or very old QAPPs that are most likely not describing the work they now do. There are many reasons for this, with the poor economy and triple-booked EPA regional officials being only one.

Valid and up-to-date quality documentation is an example of how tribal air agencies can be ahead of the curve on quality assurance. A small agency such as a tribe may have the same person conducting routine data gathering and writing the QAPP. This means that the QAPP will describe the work that is actually being done, and the site operator will know of the necessity for routine quality control (QC) checks, as well as external audits. The site operator will be familiar with their equipment and their data, and notice anomalies right away.

Lara Phelps stressed to us that this policy is designed to assist regional offices assess QAPPs, QMPs, and other quality documents, and is in no way intended to be adopted into new checklists or forms that tribes would have to complete. In addition, she and her colleagues emphasize that regional consistency in the implementation of this policy is strongly being encouraged.

The policy stresses the need for documenting several aspects of a well-run program. This is an opportunity to revisit your QAPPs and, when they are up for revision, make sure a few elements provide a thorough description of the work you do. These emphasized areas are:

1. Demonstration of the "Independent QA function:" Small agencies, such as tribal air programs, must be resourceful in allocating the QA function to someone who is removed from the line of authority for the field data collection, and has adequate scientific literacy to review QC and summary data, and provide an educated review of the data. In some cases, this person is from a sister agency, such as the water program. In no case should this QA function be held by a supervisor of the site operator, or anyone in that line of authority; however, this function must be held by someone with adequate influence to allow them to question the data, and have their questions listened to by the air monitoring agency management. A description of the ideal QA Manager, which is unrealistic for small agencies but does describe the requirements, can be found at: http://www.epa.gov/ttnamti1/qaqcrein.html. The role of the QA Manager should be documented in your QAPP, and a summary of their activities should be included in regular reports to EPA.
2. Audits and other performance assessments: Although budgets are stretched thin, it is vital to describe the number and type of assessments that are required for the type of data you are collecting. This includes: for National Ambient Air Quality Standards (NAAQS), comparable data; EPA regional Technical Systems Audits every three years, participation in the performance evaluation program (PEP) (PM2.5); National Performance Audit Program (NPAP); and annual assessments. More information on the number and types of audits that are required for different data uses can be found at the Tribal Air Monitoring System (TAMS) Center website (http://www4.nau.edu/tams/tools/).
3. Results of such audits and assessments: Reports should include descriptions of how your agency is responding to audits, and demonstrating continuous improvements.
4. Reporting of training, both formal and informal: In quarterly and annual reports, include descriptions of training that occurred since the last report. Include on-the-job training, online courses, and any other educational activities that contribute to your understanding of the work done in the air quality program. Informal training, such as collaboration with nearby agencies on trouble-shooting equipment, can be classified as informal training as long as it is documented and has measurable outcomes.

5. Documentation: QAPPs and standard operating procedures (SOPs) should be periodically reviewed and updated to reflect changes in operations, staff, sites, and equipment.

In our continuing mission to provide support and training to tribal environmental professionals, the TAMS Center is issuing a new and updated version of the TurboQAPP program in the fall of 2013. This program can be used to write a QAPP, or used as a reference for example text for various sections of QAPPs for criteria pollutants, guidance on content of each section of a QAPP and links to EPA resources. Please contact melinda.ronca-battista@nau.edu if you would like to be on the mailing list for the new version.