Request for Proposals to

Develop and Present Ambient Air Quality Monitoring Quality Assurance Courses

July 8, 2015

The Mid-Atlantic Regional Air Management Association, Inc. (MARAMA) is a voluntary, non-profit association of ten state and local air pollution control agencies. MARAMA provides training to improve the technical knowledge and skills of the staff of Mid-Atlantic air pollution control agencies.

MARAMA is seeking assistance from one or more contractors to develop and present two courses and associated on-line material on quality assurance (QA) for ambient air monitoring programs. These courses will replace and supplement the US. Environmental Protection Agency’s course numbered APTI 470, Quality Assurance for Air Pollution Measurement Systems, where APTI stands for the EPA Air Pollution Training Institute.

Overview of Existing Course and Plans for Revision

APTI 470, as described by EPA, provides a broad overview of the quality assurance required for air pollution monitoring systems. This 4-day lecture course was specifically designed for regulatory personnel who operate and oversee ambient air monitoring data. This class was intended for quality assurance coordinators or managers, field or laboratory supervisors, and technicians involved with quality assurance of monitoring system data. Materials posted on the APTI-Learn website for the course are as old as 1984 and do not reflect the current state-of-the-art requirements and procedures. EPA has provided funds to MARAMA for a project to update course materials.

Various EPA regional offices and state air quality programs and others have presented quality assurance training with updated or modified versions of APTI 470 presentations and course materials. EPA presented updated quality assurance training at EPA’s 2014 National Ambient Air Monitoring Conference. Conference presentations are posted on the EPA website at the following location: http://www.epa.gov/ttn/amtic/2014present.html. Both the pre-conference training and related presentations given at the 2014 conference provide a good starting point for the revision of APTI 470. EPA will make PowerPoint versions of the presentations available to the selected contractor, and MARAMA and EPA are also compiling information from training conducted by other EPA offices to inform this project.

EPA is currently revising its QA Handbook for ambient air monitoring. Revisions will not be complete until early 2016. As they work to revise the QA Handbook, EPA will provide information concerning the expected nature of revisions to the contractor selected for this project.
Based on feedback from EPA experts and various state monitoring agencies, the goals for this revision of APTI 470 are to update official EPA course presentations so that they reflect the most up-to-date policies and procedures, update and improve additional course materials for posting on the EPA website, and add course material to the EPA website as needed. It is anticipated that introductory online materials and two quality assurances courses will be developed, including a new/updated APTI 470 course and a follow-up course (number to be determined).

- The goal for the pre-course on-line material is to provide an overview for new staff or managers, presenting a basic introduction to the scope and nature of quality control requirements for ambient air monitoring, and identifying the location of EPA requirements and guidance documents. The contractor may assume that students attending the new APTI 470 course would be expected to spend approximately two hours reviewing this material prior to attending the course. Associated material might include sample problems to refresh students’ understanding of key statistics methods to be used in the class.

- Expected to be similar to APTI 470, the general goal for the new APTI 470 course is to review and explain all QA requirements and procedures so that those attending will understand and be able to follow correct procedures. Attendees are expected to include monitoring program managers, QA coordinators, and field and laboratory supervisors and technicians. This course is expected to be approximately 3.5 to 4 days in length. (Some agencies prefer a shorter length, and some prefer to provide additional time, so some topics could be identified as optional.) Topics may include but not be limited to the following, and topics proposed by the bidder should be organized into meaningful course sections:
  - Clean Air Act Requirements
  - QA team approach & overview of systematic planning process
  - QA Policy, Regulations, and Guidance
  - Data quality objectives process
  - Field and laboratory quality assurance and control
  - Documentation including Quality Assurance Project Plan (QAPP) and Standard Operating Procedure (SOP) development and other EPA requirements
  - Software tools
  - Requirements for Criteria Pollutants • Gases • PM2.5/PM10 • Pb (Requirements for stations and equipment, Guidance, Test methods, Calibration, Precision, Performance evaluation, Audits, etc.)
  - Analytical laboratory QA for criteria pollutants (PM2.5 and lead)
  - Addressing challenges for trace level calibration as well as peak days
  - QA Transactions and Reporting
  - Data Quality Indicator Statistics
  - Applications of statistical methods
- Technical Systems Audits
- Data validation and verification
- Data Certification
- Implications of incomplete data for nonattainment designation and classification
- How to take a pro-active approach to data quality
- Examples of field experiences and challenges for various types of equipment
- Exercises with example data sets

The general goal for the second course is to provide a refresher course for experienced personnel. This course is expected to include one day of modular lectures that could be delivered either in person or as a series of webinars (including opportunities for student interaction), plus an optional additional day if the course is offered in person. Topics for this course could include discussion of development and application of data quality objectives, QAPP development for non-criteria pollutants and special monitoring projects, QA for PAMS, IMPROVE, and air toxics sites, and/or other advanced materials. The optional additional day for in-person presentations could include approximately one hour for an EPA or state/local agency expert to provide updates and answer questions from attendees, a site visit if desired and convenient, and opportunities for additional hands-on exercises.

Proposals from experienced trainers may describe how to reorganize or revise the above content as appropriate.

The contractor selected for this project will develop materials for both new courses. The contractor will also develop supplementary material for on-line pre-course review.

It is expected that both courses will include opportunities for student interactions as well as exercises to provide practice in applicable statistical and data analysis techniques.

All materials developed and presented under this contract will become the property of EPA and MARAMA and will be made available publicly via the APTI-Learn website. There is also interest by other multi-jurisdictional organizations (MJOs) to offer the same course once developed for their member state and local agencies.

MARAMA Responsibilities

MARAMA will establish a committee of monitoring experts to review and provide comments on draft work products and will host conference calls as needed for the contractor to interact with the committee. Committee members may include monitoring program staff from EPA, MARAMA member states, and states or regional associations in other parts of the U.S.

MARAMA will provide the location and audio-visual equipment for presenting the courses. In addition MARAMA will advertise and conduct registration for the courses. MARAMA will make arrangements for appropriate refreshments and will provide name tags, sign-in sheets, evaluation forms, an attendance list, and a template for reporting scores on pre- and post-course tests.
Courses will be held at one or more locations in the MARAMA region, which includes New Jersey, Pennsylvania, Delaware, Maryland, West Virginia, the District of Columbia, Virginia, and North Carolina. EPA Region 3 offices are located in Philadelphia, and it is anticipated that the first offering of the new APTI 470 course will be in the Philadelphia metropolitan area.

MARAMA will make timely payment for services within 30 days of receipt of each accurate and complete invoice.

**Scope of Work**

Contractors may bid on development of course materials and/or presentation of one or both classes.

**Task 1 – Develop Course Materials**

The successful bidder shall propose a classroom instruction program of sufficient length (estimated to be 3.5-4 days of classroom instruction for the new APTI 470 class and 1 to 2 days of classroom/webinar instruction for the second class) and of sufficient content to address core topics that are applicable to ambient air quality monitoring quality assurance. The classroom instruction materials shall be designed to present critical information through detailed presentation slides and handouts, student interaction, and in-class or homework exercises. This task is expected to include the following:

1. Provide a work plan and schedule for development of course materials and presentation of the courses.
2. Provide at least 15 work days for MARAMA to obtain comments from the technical review committee on draft deliverables. Prepare a list of all comments received. Annotate the list to indicate responses. Revise the draft in response to comments.
3. Provide to MARAMA at least six weeks before the initial course is to be offered the agenda and/or outline for each course as well as pre-course materials.
4. Provide to MARAMA at least four weeks before the new APTI 470 course is to be offered a) the pre-course material to be posted on line, b) the final course presentation and materials for the revised APTI 470 course, and c) draft presentation and materials for the second course. Deliverables will include handouts and PowerPoint presentations that will be used during the courses, additional handouts for the in-person courses, and final pre-course supplemental material to be posted on line.

**Task 2 – Teach two courses**

The successful bidder shall present the initial course in the Philadelphia, Pennsylvania metropolitan area at a time mutually agreed upon by MARAMA and the contractor, and the second course, at a location and time mutually agreed upon by MARAMA and the contractor. The costs of the instructional support for each of these presentations shall be included separately in the bid.

For bidding purposes, it should be assumed that the facilities and any needed audio-visual equipment will be provided by MARAMA. The Contractor shall travel to the presentation sites and conduct the training classes. The Contractor shall present the course materials and conduct any other necessary and appropriate activities in support of the training class. Duties will include the following:

1. Communicate with MARAMA as necessary to ensure proper pre-course planning. Identify course support needs including audio-visual equipment.
2. Ensure adequate copies of the course materials are available for distribution at each course location.
3. Present the most up-to-date course material available to the attendees.
4. Provide copies and administer a pre-test and post-test to all attendees participating in each classroom course.
5. Provide copies and administer the OMB approved National Air Quality Training Program Course Evaluation Form to all attendees participating in each classroom course.
6. Provide a laptop computer for use by the instructor in each course presentations.
7. Submit a Course Report for each course, including:
   a. Cover page including: Course title, course number (if applicable), date offered, location, and names and affiliations of course instructors and any guest lecturers.
   b. Course agenda and objectives
   c. Student information: class roster and daily attendance
   d. Summary of course presentation: Impression of student and instructor attitudes toward the course and comments concerning facility, materials, EPA support (if applicable) and any other pertinent information.
   e. Recommendations and comments: suggestions for improving the course, summary of course evaluations from the students (and from instructors if available).
   f. Summary of Course outcomes: analysis of pre-test and post-test scores to measure course effectiveness.
   g. Completed grade report form (form will be provided by MARAMA)
   h. Students’ pre-tests and post-tests or legible copies of those items
   i. Students’ completed evaluation forms or legible copies of those items
   j. List of material developed, redeveloped, or used as supplements by the instructor.
8. Provide to MARAMA and EPA within 30 days after conclusion of each course an electronic copy of any revised course materials used for the course. Please note that this material will be in the public domain.
9. Provide accurate invoices for services, consistent with the accepted bid, within thirty (30) days after completion of tasks identified in the contract.

**Deliverables**

A kick-off conference call will be held after each contract task is awarded to review the scope of work and schedule for the specific activities. Periodic conference calls (in lieu of written progress reports) will be held to review the status of the work and discuss any outstanding issues. Calls may be held at the request of MARAMA or the contractor through use of MARAMA’s conference line. MARAMA anticipates at least two 1-hour calls to discuss responses to key comments on draft presentations and materials as part of Task 1.

All documents are to be delivered in electronic form unless otherwise specified. All documents will be public domain and in suitable form as final documents for posting on the APTI-Learn website and use in later course delivery.

Task 1 deliverables will include the following:

1. A draft and final set of Microsoft PowerPoint slides and/or other material for on-line pre-course review by students.
2. Draft and final presentation slides in Microsoft PowerPoint format for each course. These slides will be used to present the classes and copies of same slides will be distributed to students.

3. Draft and final annotated PowerPoint versions of the presentation slides for each course with notes for the presenter.

4. A preliminary and final list in Microsoft Word format of additional materials to be distributed to the students as a CDs or notebooks or on-line resources and one copy of the final materials.

5. Draft and final pre- and post-course test questions in Microsoft Word format for each course, designed to assess whether students learned key information presented in the course.

6. Draft and final answers to the test questions for each course in Microsoft Word format.

Deliverables for Task 2 will include the following:

1. Presentation of each of the two new courses at a location or locations to be determined within the MARAMA region.

2. Copies of course materials to be distributed to students in each of the courses, assuming attendance of up to 30 students per class. Materials may be paper and/or CD as agreed by MARAMA in advance.

3. Final electronic copies of PowerPoint presentations and electronic Word or PDF format copies of all course materials used in each course for posting on APTI-Learn.

Level of Effort and Schedule

MARAMA has earmarked $25,000 for this project through March 2016. If additional funding and time is considered necessary to conduct a more complete product, specific costs should be identified and explained in your proposal.

Work on course development is expected to begin in late August or early September 2015. MARAMA would like to schedule presentation of the new APTI 470 course in late 2015 or early 2016. We estimate this would necessitate draft course materials be provided by early October. Bidders should propose a workable schedule consistent with effort required, review periods noted above, and availability of key personnel.

Nature of Contract(s)

MARAMA may establish more than one contract under this request for proposals depending on the proposals received and the funding available. The contract(s) for providing instructional services will be contingent on satisfactory completion of course development tasks and are solely at MARAMA’s discretion.

The contract for development of course materials will be a firm-fixed-price contract. Fixed costs for sub-tasks for development of materials may be proposed. Invoices will be paid as sub-tasks with defined costs are completed.

Because the exact length of the two courses, extent of handouts, and the exact locations and dates they will be offered is uncertain at this time, the contract(s) for teaching the two courses will be a fixed fee for instructional services plus a reimbursement for additional allowed costs up to a maximum limit for each course. Fixed fees for instructional services must include costs for food and incidentals. Costs for lodging and transportation will be determined based on course location and dates.
Submission Requirements

Potential contractors are encouraged to bid on both activities (course development and instruction), but MARAMA will also consider proposals addressing only one of these activities.

Interested bidders may email proposals to Training@marama.org or mail proposals to:

Training Coordinator
MARAMA
8600 LaSalle Road, Suite 636
Towson, MD 21286

Proposals must be received by **5:00 p.m. on Friday July 31, 2015**. Proposals should include:

- A complete description of your approach for developing the course,
- A draft work plan, which clearly describes your proposed activities, schedule, and deliverables,
- Identification of key personnel to perform each task, specifying the amount of time each will devote to completion of each task or sub-task. Any change in key personnel will require prior approval of the MARAMA Executive Director.
- A summary of your capability and related experience,
- The percentage of minority owned/woman owned business enterprise (MBE/WBE) participation (MARAMA’s applicable “fair share” goals /objectives, as negotiated with EPA, are as follows: MBE - 12% and WBE – 14%), and
- A cost proposal separately identifying expected expenditures for course development and for instructional costs. Cost proposals shall include hourly costs for key personnel, estimated hours to complete the work, and total estimated costs.

Proposals must comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532 and certify that the contractor is not presently debarred, suspended, proposed debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

Please limit your proposal to 10 pages (12-point font) plus an appendix with supplemental information, such as references, resumes, and descriptions of recent relevant work. Please include contact information for three references knowledgeable about relevant past performance.

General Conditions

Funds available for this contract (course development and instruction) are federal funds from the U.S. Environmental Protection Agency (U.S. EPA) and contractors must meet requirements associated with the use of federal funds.

All information and data and materials produced or presented under this contract will be in the public domain (considered open source). This includes handouts and presentations and material to be posted on line. The course material developed and/or presented under this contract is intended for future use without additional payment by MARAMA or other similar regional organizations, any state or local agency, or the US Environmental Protection Agency. The final materials will be posted on the APTI-Learn Learning Management System hosted by the US Environmental Protection Agency for future public use.
Criteria for Evaluation of Proposals

MARAMA seeks contractors whose qualifications demonstrate relevant experience and understanding of the Ambient Air Quality Monitoring Quality Assurance process and skill in instructional design and presentation. Selection criteria will include:

- Responsiveness of the written proposal to the requirements outlined in this RFP
- Course content and instructional methods proposed
- Qualifications and experience and level of effort for proposed personnel
- Agreement that all course materials will be in public domain
- References
- Dates available to present the course
- Proposed costs for completing the tasks specified
- Percentage MBE/WBE participation

MARAMA is not required to select the lowest cost bid, but will consider cost among the other factors listed above.

It may be necessary to utilize more than one contractor to obtain needed expertise. MARAMA may request follow-up bids from selected contractors if necessary to obtain further information before making final selections.

For More Information

Any questions about this RFP should be sent in writing via e-mail to MARAMA’s Training Coordinators, Jackie Burkhardt and Sue Dilli at training@marama.org. Questions and answers will be posted on MARAMA’s web site at [www.marama.org](http://www.marama.org) under “Request for Proposals.” No further questions or answers will be posted after July 24, 2015.