LADCO | LAKE MICHIGAN AIR DIRECTORS CONSORTIUM

REQUEST FOR PROPOSAL

Volatile Organic Compound Content Calculations Training

The Lake Michigan Air Directors Consortium (LADCO) is seeking contractor assistance to develop and deliver training to state air agency staff on calculations of Volatile Organic Compound (VOC) content for surface coatings.

Proposals must be received no later than 5 p.m. Central on September 30, 2022. An electronic PDF copy of the proposal is required and should be sent to:

Zac Adelman
Executive Director
Lake Michigan Air Directors Consortium
adelman@ladco.org

No late proposals will be accepted, and the offer shall remain effective for a period of 60 days from the date of the mailing.

All inquiries regarding this Request for Proposal (RFP) should be directed to Zac Adelman (adelman@ladco.org) no later than 5 p.m. Central on September 9, 2022. LADCO will post responses to all received inquiries to the LADCO website RFPs page by September 14, 2022.

We expect to award the project and enter a contract with the winning bidder by October 31, 2022.

Your response to this RFP should include a complete technical proposal that describes your approach for accomplishing the activities outlined below in the Scope of Work. The technical proposal should include a draft work plan that clearly describes your technical activities, schedule, and deliverables. The technical proposal should include a summary of your capabilities and your experience in the field of work. Include a complete cost proposal with a detailed breakdown of projected expenditures by task, including person hours and other direct charges.

The cost proposal should include separate costs for both virtual and classroom delivery of the course. While we will only contract for one delivery method, given the recent travel issues related to COVID-19 we need separate costs for virtual and classroom delivery to support our planning on how to best offer the training.

Please limit the proposal to 15 pages (single spaced, 12-point font).

In addition, your response should include an appendix with supplemental information, such as references, resumes, and descriptions of recent relevant work. The supplemental information has no page limit.

All contracts will be issued by LADCO and managed by LADCO's Executive Director. It is anticipated that LADCO will award a fixed price contract as a result of this solicitation. LADCO may consider awarding another type of contract, provided that its use is consistent with the objectives and interests of the Consortium.

Funds available for this contract are federal funds from the U.S. Environmental Protection Agency (EPA) and contractors must meet requirements associated with the use of federal funds (2CFR 200).

All information and data produced and delivered under this contract will be in the public domain.

LADCO will make positive efforts to utilize small, minority business enterprises (MBE), women's business enterprises (WBE), and disadvantaged business enterprises (DBE), whenever possible.

Details of the LADCO procurement process, including draft contract terms, are available in the LADCO Procurement Policy Manual.

If your organization would like to be included on the interested bidders list for this and subsequent work, then please send an email to the LADCO Executive Director with your email address and contact information.

Scope of Work

Introduction

State air pollution management agency staff are responsible for reviewing and issuing permits to industrial sources of air pollution, and for determining compliance of these sources with the permit conditions and applicable regulations. For sources of volatile organic compounds (VOCs) air management permit and compliance engineers at the state air agencies need to have knowledge on the VOC content calculations for industrial solvents in order to assess the regulatory compliance of the permitted sources that are using the solvents in their operations. A wide range of permitted industrial operations use solvents and surface coatings that require VOC content calculations, including coatings application, coatings manufacturing, and printing.

LADCO is seeking contractor support to develop and deliver a two-day training course on VOC emissions calculations for the surface coatings industry.

Objectives

Students taking the VOC content calculations course developed and delivered through this contract will learn the following:

- The definition of VOCs, including what determines volatility
- How to read SDS, TDS, EDS, coating labels, and other documentation on VOC content.
- How to gather information from SDS, TDS, EDS, coating labels, etc. and be able to convert to units necessary to determine compliance
- How to verify that permitted facilities are using VOC content equations correctly to determine VOC content and emissions (with and without control devices)
- How to calculate as applied VOC content, with and without water and exempt solvents, and with and without being thinned (as received and as applied)
- Know when and when not to use less water and ES for VOC content calculations.

All surface coatings materials, including ink and solvents, shall be covered in this course, and the emphasis of the content calculations should be on estimating speciated and total VOC emissions from each type of surface coating.

The audience for this training will be intermediate to advanced air management agency permit and compliance engineers.

Nature of the Work Assignment

Under this work assignment, the contractor shall perform the following tasks. LADCO will evaluate the proposed approaches and cost proposals for each individual task. We may contract for some or all of the tasks, based on the merits of the proposal and available funding. For the purposes of the proposal, the contractor shall provide separate statements of work and cost estimates for each task.

Task 1: Develop the VOC Content Calculations Course Development Plan

The contractor shall create a course development plan for a 2-day training course on VOC content calculations. The development plan shall include the following elements:

- Course learning objectives
- Course outline
- Draft agenda
- Approaches for developing the course materials including:

  - Power Point lecture slides for use in delivering knowledge on the course content pursuant to the course learning objectives
  - Student engagement activities, such as VOC content calculation exercises, group work, or permit reviews
  - A student manual that includes the course slides and any additional reference materials, including calculation worksheets.
  - An instructor manual that provides notes and guidance for instructors on the course structure, materials, student engagement, and delivery
  - Pre-test and post-test

The course shall cover the following topic areas:

- Background on VOC content calculations
  - Surface coatings and VOCs
  - History of regulation
  - VOC content limits
  - EPA method 24 and 24A
- Surface coatings primer
  - Types of surface coatings
  - Sources and use of VOC content documentation
- EPA guidelines in calculating and reporting emission rates and concentrations
- Theoretical and practical applications (including hands-on exercises)
  - Converting from a mass basis to volume basis
  - Determine the VOC content per volume of coating
  - Determine the VOC content per volume of coating, less water and exempt solvents
  - Determine the VOC content per volume of coating solids
  - Determine the VOC content per mass of coating solids
  - Determine the necessary VOC mass emission rate percent reduction required to achieve equivalent compliance to the RACT coating limit when using an add on control technology
  - Determine the VOC content per volume of solids applied (deposited) adjusted to a minimum transfer efficiency
  - Determine the amount of VOC mass emitted per volume of solids for a dip tank using a 30-day rolling average basis
  - Comparison of units of measurement-computing VOC mass loading rate using various units of measurement

- Determine the volume and mass of VOC, water, exempt solvents and solids in a coating using data expressed in metric
- Confidence limit calculation procedures for waterborne coatings

The contractor shall provide a 2-week review and comment period on a draft course development plan, and then assimilate the comments on the draft into a final development plan.

Deliverables:

1. Draft course development plan
2. Final course development plan

Task 2: Develop the VOC Content Calculations Course Materials

Using the final course development plan from Task 1 the contractor shall develop the course materials, including:

- Power Point lecture slides for use in delivering knowledge on the course content pursuant to the course learning objectives
- Student engagement activities, such as VOC content calculation exercises, group work, or permit reviews
- A student manual that includes the course slides and any additional reference materials, including calculation worksheets.
- An instructor manual that provides notes and guidance for instructors on the course structure, materials, student engagement, and delivery
- Pre-test and post-test

The contractor shall provide a 2-week review and comment period on the draft course materials, and then assimilate the comments received into final course materials.

Deliverables:

1. Draft course materials
2. Final course materials

Task 3: Deliver Classroom VOC Content Calculations Training

The contractor shall deliver the training to Wisconsin Department of Natural Resources (WI DNR) air program staff over a two-day period in Madison or Milwaukee, WI. The exact dates of the training shall be determined when the project is contracted. For planning purposed, assume the training will be held in Spring 2023. The proposal shall describe the contractors plan for traveling to Madison or Milwaukee, and delivering the training for up to 40 WI DNR staff.

The proposal costs shall assume travel and labor costs for delivering the training. The course materials shall be provided in electronic format as PDFs.

The contractor shall develop a course instructors report that includes the results of the pre- and post-tests, a summary of instructor evaluation information provided by LADCO, and a narrative description of the course delivery.

Deliverables:

1. In-person training for 40 people in Madison or Milwaukee, WI in Spring 2023.
2. Instructors report

Task 4: Deliver Online VOC Content Calculations Training

The contractor shall deliver the training to Wisconsin Department of Natural Resources (WI DNR) air program staff as a virtual instructor-led training. The exact dates of the training shall be determined when the project is contracted. For planning purposed, assume the training will be held in Spring 2023. The proposal shall describe the contractors plan for delivering the training online for up to 40 WI DNR staff. The proposal costs shall assume labor and information technology (IT) costs for delivering the training. The contractor shall assume that they will be responsible for procuring, configuring, and managing the webinar system during the delivery of the course. The description of the online delivery shall consider a course schedule and engagement exercises that maximize online learning. The course materials shall be provided in electronic format as PDFs.

As with the classroom delivery described in Task 3, the contractor shall develop a course instructors report that includes the results of the pre- and post-tests, a summary of instructor evaluation information provided by LADCO, and a narrative description of the course delivery.

Deliverables:

1. Virtual instructor led training for 40 people in Madison, WI in Spring 2023.
2. Instructors report

Task 5: Project Administration

At the beginning of the project, the contractor shall develop a draft workplan describing the approach they plan to take to address Tasks 1 through 4, including a project timeline and schedule of deliverables. They shall share this workplan with LADCO for comment. The contractor shall produce a final workplan that addresses the comments from LADCO. Work shall not proceed on the contract tasks until the workplan has been approved by LADCO.

During the project, the contractor shall have regular (at least monthly) scheduled calls with LADCO to discuss the progress of the work. The contractor shall take and circulate notes and action items from these calls with LADCO.

Deliverables:

1. Draft workplan
2. Final workplan
3. Monthly conference calls, notes, and action items

Proposal Requirements

Proposals should include the following elements:

1. Project statement - summarize the project from the perspective of the bidder
2. Technical proposal - detail the approach by task used to accomplish the objectives and requirements of the project
3. Project Timeline - detail the schedule of deliverables by task
4. Cost proposal - description of the projected expenditures by task, including person hours and other direct charges
5. Bidder qualifications - description of the qualifications should include years of experience, number of staff, and a narrative highlighting the bidders capabilities
6. MBE/WBE statement - statement of whether the bidder is a registered minority or woman-owned business
7. Appendix - references, resumes, and descriptions of recent relevant work

Please limit proposal elements 1-6 to 15 pages; there is no page limit for element 7.

Level of Effort and Project Timeline

The project should be completed by May 31, 2023.

Evaluation Criteria

The following criteria will be used in evaluating the responses to this RFP. A review panel will score each of the five factors below from 1 (worst) to 5 (best). The proposal with the highest weighted score will be selected for funding.

1. Project statement: 10%
2. Technical proposal: 45%
3. Cost proposal: 20%
4. Bidder qualifications: 20%
5. MBE/WBE statement: 5%

Additional Information

The following information should be used in developing proposals for this opportunity.

- **What is meant by surface coatings (just architectural or all coatings like automotive, industrial other, printing, degreasing, etc.)?**
    - All coating materials, including ink and solvents
    - The emphasis should be on calculating emissions
- **Should the course cover compliance monitoring or VOC control devices?**
    - Yes, to the extent where VOC control efficiencies are needed in the calculations.
- **Should the course cover capture and transfer efficiency calculations?**
    - Yes, to the extent that the VOC capture efficiencies are needed in the calculations.
- **Should the course cover Method 25?**
    - No, but cover capture efficiency vs. control efficiency vs. destruction efficiency
- **Is there a regulatory motivation for this course (e.g., VOC RACT)?**
    - No specific regulatory motivation
    - The air agency staff need to be able to compare VOC content calculations against RACT, LACT, BACT, NESHAP, and NSPS
- **What about the relationship to NESHAP?**
    - The course should provide tools needed to convert units and use calculations in order to determine compliance with the units identified in NESHAP compliance limitations