



UTILITY & INDUSTRY

CEMS

TRAINING PROGRAM

For CEMS Users that are subject to:
EPA Part 75 Acid Rain, Part 60 NSPS, CSAPR,
the EGU MATS Rule and the Greenhouse Gases Regulations

**New,
Expanded
Format!**

Presented by RMB Consulting & Research, Inc.
October 3-5, 2017
Raleigh, North Carolina

**Includes
EGU MATS
Rule**

Comments from previous RMB CEMS Training Program Attendees:

*“This course was one of the best organized and informative from a practical standpoint.
The book (course manual) is much appreciated and useful.”*

“Well organized course and appeared well practiced”

*“The content was of good quality and I would recommend the course to others involved
in CEMS programs with the electric utility industry”*

“Instructors have excellent knowledge of the subjects”

This CEMS Training Program addresses Acid Rain and NSPS CEM issues and other air emissions monitoring topics such as mercury, particulate matter, 3-D flow measurement, CEMS technology and performance, the EPA CAM Rule, MACT standards, the CSAPR Rule and the constantly evolving regulations confronting the CEMS user.

RMB Consulting & Research, Inc. brings more than 200 years of combined experience in air pollution control and air pollution consulting to its custom designed training programs. We specialize in providing services primarily to the electric utility industry and its associated organizations. RMB's Utility & Industry CEMS Users Training Programs are conducted by nationally recognized experts and are designed to educate CEMS users (environmental engineers, DRs, instrument

supervisors and technicians) in the discipline of continuous emission monitoring and data reporting, and to inform them of the latest regulatory developments. RMB also provides on-site training for the Utility & Industry CEMS users responsible for complying with regulatory requirements. Utility and Industry clients desiring on-site training can choose topics from the agenda list below. Call RMB for additional information.

TRAINING PROGRAM OVERVIEW

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This comprehensive, 3-day training program is presented by RMB's CEMS experts including: Ralph Roberson, Steve Norfleet, Dru Sanders, Jack Martin, Mike O'Connell, Rob Barton, Robert Bivens, Will Roberson, and Bethany White. Other past speakers have included: Environmental Supply Company, Air Liquide, Enthalpy Analytical, and US EPA.

RMB's CEMS training session covers: (1) Discussion of the most recent CEMS rule revisions to 40 CFR Part 75; (2) An overview of 40 CFR Part 75 and NSPS Part 60 CEMS regulations; (3) Fundamental CEMS concepts, such as equations for converting measurements to units of an emission standard; (4) An introduction to gas, flow, and opacity CEMS technologies; (5) 40 CFR Part

75 CEMS certification and recertification requirements; (6) 40 CFR Part 75 CEMS QA/QC requirements; (7) EPA 3-D flow rate methods; (8) Auditing of quarterly EDRs; (9) Overview of new opacity monitor performance specifications; (10) QA/QC requirements following analyzer maintenance; (11) 40 CFR Part 75 Appendix D&E monitoring & reporting requirements; (12) Overview of mercury, particulate matter, and HCl monitoring; (13) EGU MATS requirements; and (14) the Clean Power Plan.

In addition, a CEMS Vendor Exhibition will take place at the hotel during the course. The CEMS Vendor session includes interactive operation and routine maintenance guidance, and demonstrations by manufacturers' representatives for a variety of widely used dilution and non-dilution extractive

CEMS equipment. Past representatives have included: Thermo Environmental Instruments; Teledyne Monitor Labs; M&C Products; Environmental Supply Company; and C.E.M. Solutions, among others.

The course cost is \$1,399. This fee includes a \$250 non-refundable registration deposit, tuition, an extensive course manual and USB drive including current regulatory material, coffee breaks, and three lunches. It does not include travel costs or hotel accommodations. For specific questions concerning course content or materials, contact Robert Bivens at (919) 791-3133.

Class Schedule	
Tuesday, October 3:	8am-5pm
Wednesday, October 4:	8am-3pm
Thursday, October 5:	8am-3pm

ANTICIPATED TOPICS • Fall 2017

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Course Introduction

Historical and Regulatory Overview of CEMS

- Acid Rain, NSPS, and MACT

Part 75 Audit Requirements

- RATAs and Bias
- Daily and Quarterly QA/QC
- Certification Testing

Part 75 Appendix D Requirements

Part 75 Appendix E Requirements

Part 60 Audit Requirements

Part 75 Rule Revisions and Updates

CSAPR

CEMS Fundamentals

- Units of Measurement
- Conversions
- Equations and Calculations

Gas and Flow CEMS Technology

- Straight Extractive
- Dilution Extractive
- In-Situ
- SO₂, NO_x, CO₂, and O₂
- Flow

The EGU MATS Rule

Mercury (Hg) Monitoring

QA/QC Requirements following Maintenance

- Corrective and Preventive Maintenance
- Diagnostic Test Events
- Recertification Test Events

QA Plans and QA/QC Program Requirements

Opacity COMS Technology

Part 75 Quarterly Reports and EDRs

Emissions Averaging

HCl CEMS

Particulate Matter (PM) Monitoring

Greenhouse Gases and the Clean Power Plan

Miscellaneous "Special" Topics

NOTE

Day 3 of the training will be dedicated to the EGU MATS Rule

Vendor Exhibition

Wednesday, October 4: 4pm-5:30pm

Length and/or order of course presentations subject to change. Vendor companies, specific personnel, and/or associated equipment also subject to change or cancellation.



Utility & Industry CEMS Training Program • October 3-5, 2017

REGISTRATION FORM

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MR/MS NAME _____ COMPANY _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

TELEPHONE _____ E-MAIL _____

PREVIOUS ATTENDEE _____ Yes _____ No

TRAINING PROGRAM FEE.....\$1,399 (CHECKS OR CREDIT CARDS ACCEPTED)

PLEASE MAIL, E-MAIL OR FAX THIS COMPLETED REGISTRATION FORM TO:

RMB Consulting & Research, 5104 Bur Oak Circle, Raleigh, NC 27612
(919) 510-5102 Main • (919) 510-5104 Fax • pierce@rmb-consulting.com

All checks must be made payable to RMB Consulting & Research, Inc.
All credit card information must be provided to RMB over the phone.

Training program fee includes a \$250 non-refundable registration fee, tuition, course materials (notebook and USB drive), coffee breaks, three lunches, and vendor exhibition. It does not include hotel accommodations. For specific questions concerning the course technical content materials contact Robert Bivens at (919) 791-3133. For registration and payment questions contact Stacey Pierce at (919) 791-3120.

RMB reserves the right to cancel the training program without prior notice. In the event of program cancellation, registrants will receive full refunds. Incomplete or illegible registration forms will not be accepted.

Registration forms will also not be accepted once the class is full.

Visit the Training Section on our Web Site at <http://www.rmb-consulting.com> for additional information.

RMB Consulting & Research, Inc.
5104 Bur Oak Circle
Raleigh, NC 27612

REGISTRATION

Complete the registration form in this brochure to register for the RMB Utility & Industry CEMS Users Training Program. Payments must be made by check or credit card to: RMB Consulting & Research. All registrants must be paid in full before being admitted into the training program. Classes fill to capacity quickly, so please pre-register at least 30 days prior to the course start date. Direct your questions concerning registration to the RMB Course Registrar, Stacey Pierce at (919) 791-3120.

HOTEL ACCOMMODATIONS

The RMB Utility & Industry CEMS Users Training Program will be held at the Embassy Suites Raleigh-Durham Airport/Brier Creek. This hotel, which opened in 2010, is located at Raleigh's Brier Creek Shopping Center, and is next to the Raleigh/Durham Airport (RDU). The hotel offers complimentary van transportation to and from the airport and locations within a close radius of the hotel. A limited block of rooms for RMB workshop attendees will be held until September 18, 2017. Rates are \$169/Room/Night.

Make your reservations directly with the Embassy Suites by calling either (919) 572-2200 or 1-800-Embassy.

Website:

www.tinyurl.com/rmbfall2017

Hotel Address:

**Embassy Suites
Raleigh-Durham Airport/
Brier Creek
8001 Arco Corporate Drive
Raleigh, NC 27617**