



# Continuous Emissions Monitoring (CEMS) Training Course 5400



## Course Description

All plants have processes that create pollutants; therefore, the Permit to Operate often binds the plant to install a Continuous Monitoring System (CEMS). This course will review the maintenance requirements with emphasis on minimizing downtime. Actual conditioning hardware and hands-on exercises are used to reinforce the learning process.

## Duration

5 days

## Objectives/Outcomes

Upon completing the course, the learner will be able to exhibit the ability to:

- Recognize the TCEQ/EPA Environmental regulations
  - Typical plant CEM permit requirements
  - Measurements used to calculate emissions & general reporting
  - Downtime & missing data procedures
  - 7-day drift test 7 annual RATA
  - Quarterly Cylinder Gas Audit (CGA)
  - 24-hr daily validations/calibrations
- Identify CEM's Sample Conditioning Systems
  - Dry/Wet analysis
  - Sample conditioning hardware
  - Probe types for effective sampling
  - Sulfur absorption & difficulty
  - Phase prevention, effective water removal or proper vaporization
- Know the Theory of Operation
  - Analyzers
  - Flow Measurement Systems
- Identify CEM's preventive maintenance
  - Daily checks
  - Common problems & trouble shooting techniques

## Intended Audience

All Engineers, Technicians, and Supervisors involved with meeting these regulatory requirements

## Course Prerequisites

- Analytical Best Practices
- CBT – Process Plant Math – in Topclass



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## Technical Requirements

None

## Materials

Each learner will be provided with the appropriate course workbook.

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