



Providing you with the right team
& the right solution every time

CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

COURSE DESCRIPTION



INTRODUCTION

In this section we will identify what a CEMS system is, why it is needed, and what equipment it consists of.



BASIC CHEMISTRY

In this section we will take a brief look at chemistry and the role it plays in the daily operation of a plant and how it may affect our CEMS equipment and measurements.



TYPES OF CEMS

In this section we will discuss the different types of CEMS you may encounter as an analyzer technician. This will include, but not be limited to, Extractive, In-Situ and Remote Extractive.



MEASUREMENT TECHNOLOGIES

In this section we will look at the different technologies used in the CEMS, including Paramagnetic, Electrochemical, NDIR, Chemiluminescent, Flame Ionization, Laser, Zirconia and others.



REGULATORY REQUIREMENTS

In this section we will look at the regulatory requirements we are meeting by using a CEMS.



INSTALLATION, MAINTENANCE & TROUBLESHOOTING

In this section we will look at equipment installation options and requirements, sample system installation and maintenance as well as common troubleshooting items in the equipment and sample system.



DATA ANALYSIS & DOCUMENTATION

In this section we will look at using a spreadsheet to graph and analyze data and use this information for basic troubleshooting and validation. We will also look at the documentation required to operate and maintain a CEMS.



LABS & EXERCISES

There will be a variety of impromptu troubleshooting exercises and structured lab exercises throughout the entire course. The class will conclude with a final exam to measure the student(s) comprehension of the materials taught.



Need a solution? Contact us today to schedule!

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