



Function of Common Air Pollution Control Devices

July 7-9, 2026 | Online Only | All Times EDT

Proposed Agenda

Day 1: 9:00 AM – 3:30 PM

Basic Concepts

Course Introduction

Basic Concepts

Capture and Control

Control of Particulate Emissions

Separators

Baghouses

Day 2: 9:00 AM – 3:30 PM

Control of Particulate Emissions

Wet Scrubbers

Electrostatic Precipitators

Control of Volatile Organic Compounds

Flares

Thermal Oxidizers

Refrigerated Condenser

Adjourn

Day 3: 9:00 AM – 3:30 PM

Absorption

Adsorption

Control of Carbon Monoxide

Carbon Monoxide Controls

Control of Acid Gases

Acid Gas Controls

Parametric Monitoring

Adjourn



Function of Common Air Pollution Control Devices

Class Length: 16 hours (3 days / 5½ hours each day)

CEU: 2

Who Should Attend

This is an introductory course designed for agency inspectors, permit writers, and regulation developers who have the responsibility to review air pollution control devices.

Learning Objectives

This course is designed to give attendees a basic understanding of the different types and operating characteristics of air pollution control devices that are available for particulate matter, volatile organic compounds, carbon monoxide, acid gases, and hazardous air pollutants. Course topics include:

- Background on ideal gas law and capture and control of air pollutants;
- Particulate controls, including separators, fabric filters, scrubbers, and electrostatic precipitators;
- Volatile organic compound controls, including minimization, oxidation, condensation, adsorption, and absorption;
- Carbon monoxide controls, including minimization, catalysts, and oxidation;
- Acid gas controls, including prevention, absorption, and adsorption; and
- Parametric monitoring of air pollution control equipment.

Instructor Bio

Andrew D. Shroads, QEP has over 27 years of experience in air pollution control, working in the Weirton Steel Corporation Environmental Control Department, as an inspector for the Cleveland Division of Air Quality, and as a consultant for regulatory agencies and private clients. He helps local, state, tribal, and federal government agencies develop air pollution control requirements and helps industry comply with air pollution permit and regulatory requirements. He is currently working as the interim environmental manager for three companies in Ohio, developing air pollution control requirements for the state of New Jersey, assisting tribes to develop air permitting programs, and assessing the environmental impacts from federal sites. He also develops and teaches air pollution control training programs. In his spare time, he researches the history of air pollution control.