



**Western States Air Resources Council  
(WESTAR Council) &  
New Solutions Training Program**

**June 20-22, 2023**

**Training Location**

**State of Idaho Dept. of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
Phone: 208-373-0502**

**Electrostatic Precipitators (TOXC242)**

Tuesday, June 20  
8:30 am – 5:00 pm  
\*w/site visit

**Industrial Boilers (TOXC226)**

Wednesday, June 21  
8:30 am – 5:00 pm  
\*w/site visit

**Introduction to Continuous Monitoring Systems (SRCE103)**

Thursday, June 22  
8:30 am – 5:00 pm  
\*w/site visit

**Registration Deadline: Friday, June 2, 2023**

**\*Field visits and an exam are required for completion of each course. All students must have proper safety equipment, including hard hat, safety shoes, earplugs, and eye protection.**

**For more information, please contact: Jeff Gabler, Training Mgr - (503) 744-0486 or [jgabler@westar.org](mailto:jgabler@westar.org)**

## **ELECTROSTATIC PRECIPITATORS (TOXC242)**

LEARNING OBJECTIVES: This basic one-day course covers the fundamentals of electrostatic precipitator (ESP) operation for fine particulate or aerosols and the likely defects or operator oversights. Topics include theory and design, cleaning cycles, operation and maintenance and inspection techniques. After completion of this course, learners will be able to:

- List the major industrial applications for ESPs
- Explain the theory of operation of ESPs, using appropriate terminology
- Describe the major types/categories of ESPs
- List the main things to consider in designing an ESP
- List the major components of a typical ESP and explain the functions of these components
- Describe how ESP performance can be monitored by operators
- Explain in detail how to conduct an inspection of an ESP

## **INDUSTRIAL BOILERS (TOXC226)**

LEARNING OBJECTIVES: Those completing this course will gain a basic understanding of the general information associated with industrial boiler operations. Attendees will be able to perform regulatory reviews involving the following elements of industrial boilers:

- Air Pollution – Why
- Boiler Uses
- Boiler Theory and Operation
- Air Pollution Formation
- Air Pollution Control Devices
- Boiler Regulations
- Typical Permit Conditions
- Inspection Procedures

## **INTRODUCTION TO CONTINUOUS MONITORING SYSTEMS (SRCE103)**

LEARNING OBJECTIVES: Those completing this basic course will gain a basic understanding of the general information associated with continuous emission monitoring. Attendees will be able to perform regulatory reviews involving the following elements of Continuous Emissions Monitoring (CEM) systems:

- Implementing Regulations
- Basic Theory and Operation
- System Components
- System Certification Requirements
- Inspection and Quality Assurance

## REGISTRATION INSTRUCTIONS:

1. Log onto EPA's AirKnowledge and create a profile, or log onto your existing AirKnowledge account.  
<https://epaapti.csod.com/client/epaapti/default.aspx>
2. When you complete your profile, you will receive a confirmation e-mail to activate your new account. It may take several minutes before receiving the email.
3. Once activated, log into your account.
4. Click the "Instructor Lead Training Calendar" link under the "My Training" tab.
5. Search the calendar for the training date(s). On the calendar you will see a course description. Hover over the text for additional information.
6. To register click the course title link.
7. In the lower righthand corner of the page you will see a "Request" button. Click it.
8. At this point you have requested a seat in the training. Because demand for WESTAR sponsored training frequently exceeds availability all registrants are placed on a waitlist.
9. You will receive an email from [Jeff Gabler](#) confirming your request.
10. WESTAR attempts to accommodate all requests but at times it may be necessary to prioritize attendees.



## Electrostatic Precipitators (TOXC242) Tuesday, June 20, 2023

### Tentative Agenda

8:30	Introductions/Course Overview/Pre-Test
9:00	Electrostatic Precipitators (ESP) Theory
9:30	ESP Design Considerations
10:30	ESP Components <ul style="list-style-type: none"><li>• Overview</li><li>• Gas Flow Distribution</li><li>• Electrodes</li><li>• Rappers</li><li>• Hoppers</li><li>• High Voltage Equipment</li></ul>
12:00	Lunch (on your own)
1:00	Performance Monitoring Basics, Inspection and Safety
1:45	Site Visit
4:00	Course Review & Post-Test
5:00	Adjourn



## Industrial Boilers (TOXC226) Wednesday, June 21, 2023

### Tentative Agenda

8:30	Introduction/Course Overview/Pre-Test
9:00	Boiler Uses, Terminology, and Boiler Types
9:30	Theory & Operation of Boilers
10:00	Break
10:15	Boiler Components & Designs
11:00	Emissions and Control Techniques
12:00	Lunch (on your own)
1:00	Boiler Regulations & Permits
1:30	Monitoring, Source Testing, Inspections, and Safety
2:00	Site Visit
4:30	Questions, Review & Course Examination
5:00	Adjourn



**Introduction to Continuous Monitoring Systems  
(SRCE103)  
Thursday, June 22, 2023**

**Tentative Agenda**

8:30	Introduction/Course Overview/Pre-Test
9:00	Purpose & Types of CMS
10:45	Break
11:00	CMS in Federal Regulations
11:30	Audits/Inspection & Enforcement
12:00	Lunch (on your own)
1:00	Audits/Inspection & Enforcement (continued)
1:30	Site Visit
4:30	Questions, Review & Course Examination
5:00	Adjourn