

WESTAR Council

Monitoring Compliance Testing & Source Test Observation (APTI 450/468)

August 15-17, 2017

REGISTRATION DEADLINE:

Friday, July 21, 2017

Hawaii Clean Air Branch

919 Ala Moana Blvd, 5th Floor

Honolulu, HI 96814

Phone: (808) 586-4200



REGISTRATION INSTRUCTIONS:

First Time Users:

Please go to: www.apti-learn.net and follow the below steps:

1. Click on the "First time user? Click here to register" link in the upper right-hand corner of the webpage;
2. First screen requires: 1) work email address; 2) first and last names; 3) password; and 4) security question;
3. Second screen asks about affiliation/agency. There are two options for filling out this section:
 - Agency Quick Search, or;
 - Affiliation/Agency
4. Third screen includes a list of job functions and other profile information. You can click as many (or few) job functions as appropriate. Once you have completed this third screen, you are done setting up your profile.

After completing the profile:

5. Click the "Register" tab on the left side, or the "Register" bubble in the middle of the page;
6. Scroll down the 2017 Training Calendar until you see training course that you are interested in registering for;
7. On the right side of the table you will see a "register" link;
8. Click the "register" link, and voila you are registered (be patient it takes a few seconds for the confirmation note to pop-up);
9. You will receive an automatically generated email saying that you have been placed on a waiting list (this is so unapproved attendees can be weeded out).
10. Once approved, you will receive a second email saying you are enrolled.

Previously Registered Users (www.APTI-Learn.net):

1. Enter email address and password in appropriate spaces;
2. Go to step 5 (above) and follow directions.

IF YOU NEED ASSISTANCE REGISTERING FOR THE COURSE PLEASE CONTACT: JEFF GABLER (503) 478-4955 or JGABLER@WESTAR.ORG

TUESDAY, AUGUST 15, 2017

8:30	am	Welcome & Introductions
8:45	am	Pre-Test
9:15	am	Introduction to/Sources of Methods
		<u>Topics Addressing Source Testing Guidance</u>
10:00	am	EPA's National Stack Testing Guidance and Compliance Monitoring Strategy
10:30	am	Break
10:45	am	Introduction to Stack Testing and Gas Physics <ul style="list-style-type: none">• Gas Physics• Boyle/Charles Laws• Correction to Standard Temperature & Pressure
11:30	am	Lunch (on your own)
		<u>Topics Addressing Federal Reference Methods (FRM) 1 - 5</u>
12:30	pm	Overview of Federal Reference Methods (FRM) 1-5 (video)
1:15	pm	Stack Testing Basics: FRMs 1-2 <ul style="list-style-type: none">• Sample Point Locations (IsoCalc Spreadsheet)• Stack Test Velocity (IsoCalc Spreadsheet)• Cyclonic and Non-Parallel Flows & Port Locations
2:30	pm	Agency Observer Checklist
2:45	pm	Break
3:00	pm	Stack Testing Basics: FRMs 3-4 <ul style="list-style-type: none">• Stack Gas Molecular Weight (IsoCalc Spreadsheet)• Stack Gas Moisture (IsoCalc Spreadsheet)• Sampling Train Configuration
4:15	pm	Agency Observation Checklist
4:30	pm	Review Day 1/Homework Problems/Adjourn for Day

WEDNESDAY, AUGUST 16, 2017

8:00	am	Homework Review
8:15	am	FRMs 5 <ul style="list-style-type: none">• Operation• Associated Equations

		<ul style="list-style-type: none">• Setting % Isokinetic Sampling Rate• Agency Observer Checklist
10:15	am	Break
10:30	am	The Source Test
11:00	am	Role of Agency Inspector
12:00	noon	Lunch (on your own)
1:00	pm	FRM 201/201A for PM-10, PM-2.5
1:30	pm	F-Factors
2:00	pm	FRM 202 Condensable PM
2:45	pm	Break
3:00	pm	FRM 29/SW-846, Method 0060, Multi-Metals Sampling, FRM 12 for Inorganic Lead and FRM 306 for Chromium
3:30	pm	FRM 26/26A/SW-846/Methods 0050/0051 (HCl/Cl ₂)
4:30	pm	Review Day 2/Homework/Adjourn

THURSDAY, AUGUST 17, 2017

8:00	am	Homework Review
8:30	am	Introduction to VOCs/Selecting VOC Sampling and Analytical Methods (State of Pennsylvania Selection Process) Reporting VOC Emissions (in ppms? In #/hr?) and Calculations (i.e.; "As Carbon?"; "As VOCs?"; "As Organics?"; "As Propane?")
10:00	am	Overview of Stack Testing for VOCs Utilizing FRMs 18, 25, 25A, CTS 035, and SW-846 Methods
11:00	am	Municipal Solid Waste Landfill Emissions and Sampling of VOC and HAPs
12:00	noon	Lunch (on your own)
1:00	pm	FRM 18, FRM 25, FRM 25A, Weaknesses/Strengths
1:15	pm	FRM Method 204 PTE/TTE Enclosures, Capture Efficiency/Calculations
2:30	pm	Stack Testing Special Topics <ul style="list-style-type: none">• High Moisture Stacks• High Pressure Stacks• High VOC Concentration Stacks/Molecular Weight Determination

3:00	pm	Break
3:15	pm	Reciprocating Internal Combustion Engines (RICE) Sampling Overview of CEMs for Engines and Gas Turbine Testing <ul style="list-style-type: none"> • FRM 6C, 7E, 3A and 20 • Fourier Transform Infrared (FTIR) Spectroscopy Technology • ASTM D6522-00 (Portable Analyzer Technology)
3:45	pm	RATA and CGAs
4:00	pm	FRM 205 (Gas Dilution System)
4:30	pm	FRM 320/ASTM D6348-03, Safety on the Stack Test, Post-Test

ABOUT THE TRAINING COURSE

The objective of EPA's APTI Course #450/#468 is to provide Agency personnel the needed background information, checklist, and guidance associated with EPA methodologies involving stack test for characterizing and quantifying criteria and HAPs from industrial sources. This course will address Federal Reference Methods (FRMs) 1-5 (isokinetic stack testing and stack test basics), FRMs 2F, 2G, and 2H (velocity), stack testing for volatile organic compounds (FRMs 18, 25, 25A/B), SO₂ (FRMs 6, 6A, and 8), NO_x (FRMs 7, 7C), dioxin/furans and PCBs (FRM 23), heavy metals (FRM 29), and instrumental (FRMs 3A, 6C, and 7E).

The course will present standardized stack test methodology for sampling and analysis of air pollutants as identified in the Code of Federal Regulations (CFR), Part 60, Appendix A. In addition, information will be presented on EPA's stack test monitoring programs associated with PM-10 (Methods 201 A/B) and condensable particulate (Method 202) monitoring from CFR 51 Subpart M. Specific source test checklists will be demonstrated during the presentation for each test methodology as part of the course. Participants will learn how to use the checklist in performing source test observations, how to observe mandated QA/QC requirements associated with each methodology, and how to use source test databases available to the air pollution scientist.

At the end of this course, the agency personnel will gain an understanding of the unique source test methods used to accurately characterize air pollutant emissions from industrial sources. The agency personnel will learn about EPA's programs that require characterization of air pollutants from industrial sources utilizing FRMs.

SPACE LIMITATION: Registration is limited to 30 attendees. Air quality staff from the fifteen western states receive registration preference.

REGISTRATION FEES: There are no registration fees for state, local or tribal air quality agency staff. For federal employees registration fees are \$750.

TRAINING LOCATION

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