

WESTAR Council

Air Dispersion Modeling

October 14-15, 2019

REGISTRATION DEADLINE:
Friday, September 20, 2019

State of Hawaii - Clean Air Branch

2827 Waimano Home Road
Hale Ola Building, Room 130
Pearl City, Hawaii 96782
Phone: 808-586-4200



REGISTRATION INSTRUCTIONS:

First Time Users (www.APTI-Learn.net):

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 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 (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

MONDAY, OCTOBER 14, 2019

8:00am - 5:00 pm

- Introduction to Atmospheric Physics of Air Dispersion
 - Energy balance
 - Heat flux
 - Atmospheric Boundary Layer (ABL)
 - Turbulence
 - Meteorology
 - Receptors
 - Terrain
 - Plume rise
 - Building downwash
 - Dispersion
 - Plumes
 - Deposition
- Hands-on Meteorological Data Processing
- Overview & Data Input for all AERMOD & BPIP Models
- Coordinated Systems & Maps
- Terrain Processing & Land-Use
- Hands-on BPIP
- Hands-on AERSURFACE
- Hands-on AERMINUTE
- Hands-on AERMOD
- Terrain Processing
- Hands-on AERMAP
- Results Analysis

TUESDAY, OCTOBER 15, 2019

8:00am - 5:00 pm

- Advanced Atmospheric Physics – Planetary Boundary Layer Theory & Turbulence
- Special Topics
 - Appendix W & AERMOD Updates, EPA Clearinghouse, Update on O₃, PM_{2.5}, Prognostic Met Data, NSR, PSD, FLM, FLAG, SO₂ Implementation Modeling
- Modeling Options for Conversion of NO_x to NO₂ – theory & case study
- NAAQS Modeling, NO₂, SO₂, PM_{2.5}, Lead
- Hands-on “DIY” Case
- Air Dispersion Modeling Challenges Detailed Case Study
- Multi-Chemical Runs

- West & Dry Deposition/Depletion

ABOUT THE TRAINING

COURSE DESCRIPTION: This 2-day training course is not intended to produce modelers but rather to focus on atmospheric science principles, model options, and configurations, as well as pre- and post-processing steps that ultimately determine the outcome of the modeling study. The course will develop a solid understanding of regulatory air dispersion modeling fundamentals combined with the application of this knowledge toward solving real-world air quality challenges. Practical and real-world AERMOD examples will be utilized throughout the course to effectively demonstrate how these topics work together to influence model outcomes. In addition, hands-on training is incorporated throughout the training to reinforce concepts.

The intent of the course is to empower permit engineers and managers with the knowledge and real-world experience needed to quickly assess the validity of model selection, configuration, and results interpretation as related to specific regulatory programs. Emphasis is on explaining and demonstrating important modeling concepts that permit writers and managers must understand to make informed and defensible decisions during the permitting process to ensure the permit conditions meet regulatory requirements.

SPACE LIMITATION: Registration is limited to 20 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 \$500.

TRAINING LOCATION

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