

2021 MARAMA Air Quality Monitoring Training Committee Virtual Workshop

December 6 – 9, 2021

GoToWebinar / Microsoft Teams

Workshop Objectives

This workshop will provide an opportunity to interact with and learn from MARAMA member agency monitoring program representatives as well as invited expert speakers and MARAMA air directors. Participants will share experiences meeting challenges with new air quality monitoring technology, updated data analysis and quality assurance methods, and revised regulatory requirements.

AGENDA – Updated November 15, 2021 (All Times are in Eastern Standard Time (EST))

Training Day – Monday, December 6, 2021

AM Training Sessions

9:00 – 12:00 Air Monitoring Data Management System Training

Option 1:

9:00 – 12:00 Agilaire AirVision Training
(Steve Drevik, Agilaire)

Option 2:

9:00 – 12:00 Dr. Das Envista Training
(Dr. Das Team)

12:00 – 1:00 **LUNCH**

PM Training Sessions

1:00 – 5:00 Equipment and Data Validation/Data Analysis Training

Option 1A – PM2.5 Sampler and True NO2 Sensor Training:

1:00 – 2:00 Teledyne T640 PM2.5 Samplers
2:00 – 3:00 Met-One BAM 1020, 1022 PM2.5 Samplers
3:00 – 4:00 Teledyne N500 True NO2 Sensors
4:00 – 5:00 Teledyne N500 True NO2 Sensors – Calibration Process

Option 1B – PM2.5 Sampler and NO2 Sensor Training:

1:00 – 3:00 Thermo-Fisher 1405 PM2.5 Samplers
3:00 – 5:00 Thermo-Fisher NO2 Sensors

Option 2 – Data Validation / Data Analysis Training:

1:00 – 3:00 APTI 470 - Data Validation (Verena Joerger, EPA Region 3)
3:00 – 5:00 Satellite Imagery Processing via Python – Aerosol Optical Depth (Amy Huff, NOAA)

Day 1 – Tuesday, December 7, 2021

- 8:30 – 8:50 Welcome to Day 1, Review Agenda
- 9:00 – 9:45 **KEYNOTE SPEAKER** – World Health Organization’s 2021 Air Pollutant Standards
(*WHO Speakers*)
- 9:45 – 10:00 **Q&A Session**
- 10:00 – 10:45 EPA PM Integrated Science Assessment Discussion
(*Jason Sacks and Kris Novak, EPA OAQPS*)
- 10:45 – 11:00 **Q&A Session**
- 11:00 – 11:15 **BREAK**

EPA OAQPS Overview

- 11:15 – 11:45 EPA OAQPS update (*Kristen Benedict, EPA OAQPS*)
- 11:45 – 12:00 **Q&A Session**
- 12:00 – 1:00 **LUNCH**

EPA Regional Office Overview

- 1:00 – 1:20 EPA Region 2 update (*Gavin Lau, EPA Region 2*)
- 1:20 – 1:40 EPA Region 3 update (*Alice Chow, EPA Region 3*)
- 1:40 – 2:00 EPA Region 4 update (*EPA Region 4*)
- 2:00 – 2:15 EPA Region 3 Science Program update (*Verena Joerger, EPA Region 3*)
- 2:15 – 2:25 **Q&A Session**
- 2:25 – 2:35 **BREAK**

Quality Assurance

- 2:35 – 2:55 EPA OAQPS Update (*Greg Noah, EPA OAQPS*)
- 2:55 – 3:15 EPA Region 3 Update (*Verena Joerger, EPA Region 3*)
- 3:15 – 3:35 EPA Region 3 Contractor Update – PEP/TTP Audits (*Matthieu Miller, ICF*)
- 3:35 – 3:45 **Q&A Session**
- 3:45 – 4:00 Day 1 – Wrap-up and Adjourn

Day 2 – Wednesday, December 8, 2021

- 8:30 – 8:45 Welcome to Day 2, Review Agenda
- 8:45 – 9:15 PM2.5 Induced Air Quality Health Impacts of the Global Food System
(*Srinidhi Balasubramanian, Indian Institute of Technology – Bombay*)
- 9:15 – 9:30 Q&A Session

PAMS Implementation

- 9:30 – 9:50 EPA OAQPS Update (*Kevin Cavender, EPA OAQPS*)
- 9:50 – 10:10 Ceilometer Update (*Ruben Delgado, UMBC*)
- 10:10 – 10:30 PANDORA Update (*Lukas Valin, EPA ORD*)
- 10:30 – 10:40 BREAK
- 10:40 – 11:45 State/Local Agency Roundtable
- 11:45 – 12:00 Q&A Session
- 12:00 – 1:00 LUNCH

Program Updates

- 1:00 – 1:20 EPA AirNow Update (*John White, EPA OAQPS*)
- 1:20 – 1:40 CASTNET Update (*Timothy Sharac, EPA Headquarters*)
- 1:40 – 2:00 IMPROVE Update (*Scott Copeland, Colorado State University*)
- 2:00 – 2:10 Q&A Session
- 2:10 – 2:20 BREAK

2021 Domestic and International Events

- 2:20 – 2:40 Air Monitoring in Africa (*Dr. R Subramanian, Qatar Environment & Energy Research Institute*)
- 2:40 – 3:00 Copernicus Atmospheric Monitoring Service and the Cumbre Vieja Volcanic Eruption
(*Dr. Mark Parrington, ECMWF*)
- 3:00 – 3:20 India Biomass Burning (*Dr. Pawan Gupta, NASA*)
- 3:20 – 3:40 2021 Western US Forest Fire Season (*Dr. Amber Ortega, US Wildlife Service*)
- 3:40 – 4:00 2021 Arizona Dust Season (*Scott DiBiase, Pinal County, AZ Air Quality Control Dist.*)
- 4:00 – 4:15 Q&A Session
- 4:15 – 4:30 Day 2 – Wrap-up and Adjourn

Day 3 – Thursday, December 9, 2021

- 8:30 – 8:45 Welcome to Day 3, Review Agenda
- 8:45 – 9:15 How to Prepare an Air Quality Forecast (*NJ DEP Team*)
- 9:15 – 9:30 **Q&A Session**

Roundtable Discussion

- 9:15 – 10:20 Monitoring program leads from each agency (*Lightning Round, 5-min presentation*)
- 10:20 – 10:30 **Q&A Session**
- 10:20 – 10:30 **BREAK**

Pointers, Ploys and Procedures

- 10:30 – 11:45 Agency Tips on Operating Procedures of Different Types of Equipment (*10-minute agency presentation*)

Topics Include...

TBD

- 11:45 – 12:00 **Q&A Session**
- 12:00 – 1:00 **LUNCH**

Asset Management

- 1:00 – 1:20 Wisconsin DNR Asset Management Project (*Wisconsin DNR*)
- 1:20 – 2:00 Pennsylvania DEP Asset Management Project (*Sean Nolan, PA DEP*)
- 2:00 – 2:15 **Q&A Session**
- 2:15 – 2:30 **BREAK**

Campaign Updates and Future Projects

- 2:30 – 2:50 Houston's TRACER-AQ Study (*Dr. Laura Judd and Dr. John Sullivan, NASA*)
- 2:50 – 3:10 Michigan's MOOSE Study (*Marta Fuoco, EPA Region 5*)
- 3:10 – 3:30 TEMPO Introduction (*Dr. Aaron Naeger, NASA*)
- 3:30 – 3:45 **Q&A Session**
- 3:45 – 4:00 Day 3 – Wrap-up and Adjourn