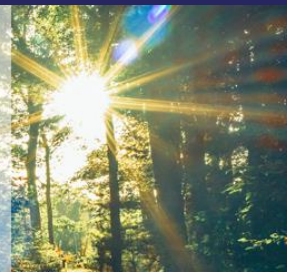




# Improving Particulate Matter Reporting



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

# Improving Particulate Matter Reporting

How DEEP Is Working to Meet EPA Requests  
And How Your Facility Can Assist

Alan Welch

Air Pollution Control Engineer

Air Quality Modeling & Emissions Inventory Group

State Implementation Plan Revision Advisory Committee (SIPRAC)

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# Background of Particulate Matter (PM)

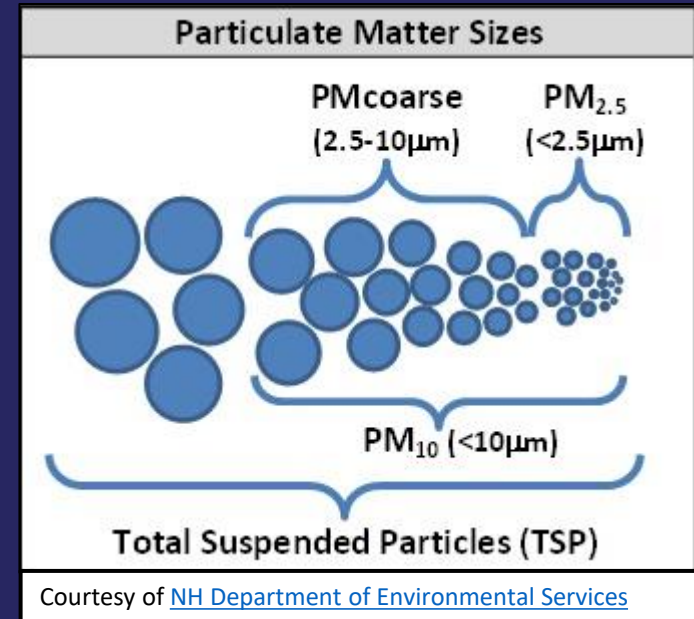
## Five types of PM in EMIT

– Three are real, physical forms:

- $PM_{10}$  Filterable
- $PM_{2.5}$  Filterable
- PM Condensable

– Two are summations:

- $PM_{10}$  Primary =  $PM_{10}$  Filterable + PM Condensable
- $PM_{2.5}$  Primary =  $PM_{2.5}$  Filterable + PM Condensable





# EPA Requests for States

## 🗨️ Improve Reporting of PM Emissions

- Speciate Primary PM into Filterable and Condensable components

## 🗨️ Submit controls on each piece of equipment

- Type of Control Measure

- Three types of Control Efficiencies in EMIT

- Rated: Removal of Pollutant Determined by Testing or Manufacturer Specification
- Adjustment for Malfunction: Account for control measure downtime
- Capture: 100% except in cases of significant fugitive emissions



# Procedure for Reporting Emissions

## ■ Emission Factor Origins (Ordered by CT DEEP/EPA Preference)

- 1) Monitored Emissions
  - 2) Material Balances/Manufacturer Specifications
  - 3) Facility/State Factors
  - 4) EPA Factors
  - 5) Vendor/Trade Group Factors
- \* Engineering Judgment

- CEMS – CONTINUOUS EMISSION MONITORING SYSTEM
- STACK TEST – AFTER CONTROL
- STACK TEST – PRIOR CONTROL

- SITE-SPECIFIC EMISSION FACTOR
- STATE/LOCAL EMISSION FACTOR
- STATE/LOCAL SPECIATION PROFILE

- EPA EMISSION FACTOR
- EPA ALT EMISSION FACTOR
- EPA SPECIATION PROFILE

■ Do Not Use “Expired EMIT EPA Default Factor” or “SURROGATE (INTERNAL ONLY)”  
– Only use “EMITTANT ACCOUNTED FOR” for co-burning fuels

■ Always use CEMS or Stack Test if available!



# CT DEEP Effort to Date

## 📄 Stack Tests

- Ensure processes with stack test data use said data to report emissions
- EPA Methods
  - 5 – Filterable  $PM_{10}$
  - 201a – Filterable  $PM_{2.5}$
  - 202 – Condensable PM

## 📄 Control Efficiencies

- Condensable PM in most cases should either have no control or 0% efficiency
- Primary PM control efficiencies must be derived
  - EMIT only allows efficiencies to be entered out to two decimal places (e.g. 24.25%)



# Request of Reporters on 2021 Emissions Statements

- ▶ Report  $PM_{10}$  Filterable,  $PM_{2.5}$  Filterable, and PM Condensable
  - Remember that PM Primary = PM Filterable + PM Condensable
  - Fuel Burning Equipment Will Be Expected to Report Non-Zero Condensable Emissions
- ▶ If you have stack test data, use it!
  - New EMIT guidance for PM and Stack Test Reporting will be available on DEEP's Website
- ▶ Remove any inappropriate origins (Expired, Surrogate, Accounted For)
- ▶ Remember DEEP is here to assist with any questions or problems



# Questions?

Alan Welch

Air Pollution Control Engineer

[Alan.Welch@CT.gov](mailto:Alan.Welch@CT.gov)

860-424-3520

Steve Potter

Air Pollution Control Engineer

[Steven.Potter@CT.gov](mailto:Steven.Potter@CT.gov)

860-424-3385

Rick Rodrigue

Supervising APCE

[Richard.Rodrigue@CT.gov](mailto:Richard.Rodrigue@CT.gov)

860-424-3429

