

Proposal to Update PM<sub>2.5</sub> Data in AQS from  
T640/T640X PM Mass Monitors

# Proposed update of Teledyne T640 and T640X monitoring data

- In April 2023 EPA approved a modification of the Federal Equivalent Method (FEM) designation for the Teledyne Advanced Pollution Instrumentation Model T640 PM mass monitor, including the 640X option, to address a positive bias in the method.
  - This was consistent with advice from the Clean Air Scientific Advisory Committee and to comments from States on monitoring method updates proposed in the reconsideration of the PM NAAQS.
- By January of 2024, monitoring agencies indicated that almost 100% of the T640 and T640X PM<sub>2.5</sub> FEMs in the regulatory network have updated to utilize the Network Data Alignment.
- EPA is providing notice of its plan to update PM<sub>2.5</sub> data collected since 2017 with Teledyne T640 and T640X FEMs with the Network Data Alignment methodology.
- EPA believes it is important to update the historical data in AQS to ensure that the most scientifically accurate data are utilized in peer-reviewed research, in particular in human health and ecosystem research and analyses that support the NAAQS review process.
- EPA wants to ensure that regulatory decisions, such as PSD permitting, designations, exceptional events, and attainment planning, are based on dependable and accurate air quality data.

# Milestones

- 2/15/24: Federal Register Notice of Opportunity to Comment on Proposed Update to PM<sub>2.5</sub> Data from T640/T640X PM Mass Monitors
  - Supplemental Documentation: <https://www.epa.gov/aqs/aqs-memos-monitoring-and-policy>
- 3/15/24: Comments due (Docket ID No. EPA-HQ-OAR-2023-0642)
- April: anticipate finalization of data update (if proposal finalized)
- May/June: anticipate utilization of updated data in design values (if proposal finalized)

# Overview of Update Process (if proposal is finalized)

- EPA intends to implement the data update entirely within AQS:
  - Data: all hourly T640 and T640X PM<sub>2.5</sub> concentration data starting in 2017
  - Years: 2017 to present
- Updated data will be added automatically to AQS
  - The original data will remain in AQS and be publicly available
  - Users will be able to distinguish between the updated data and newer T640 and T640x data measured with the Network Data Alignment
- To implement the Network Data Alignment methodology, EPA will use the hourly ambient temperature data in AQS associated with the site
  - If hourly ambient temperature data are unavailable, the more conservative warmer temperature correction will be used
  - EPA strongly encourages monitoring agencies to submit the hourly ambient temperature data
- Monitoring Agencies will have the opportunity to review the updated data in AQS during the month of April, before the certification date of May 1, 2024