Initial Area Designations for the 2024 Revised Annual PM$_{2.5}$ NAAQS

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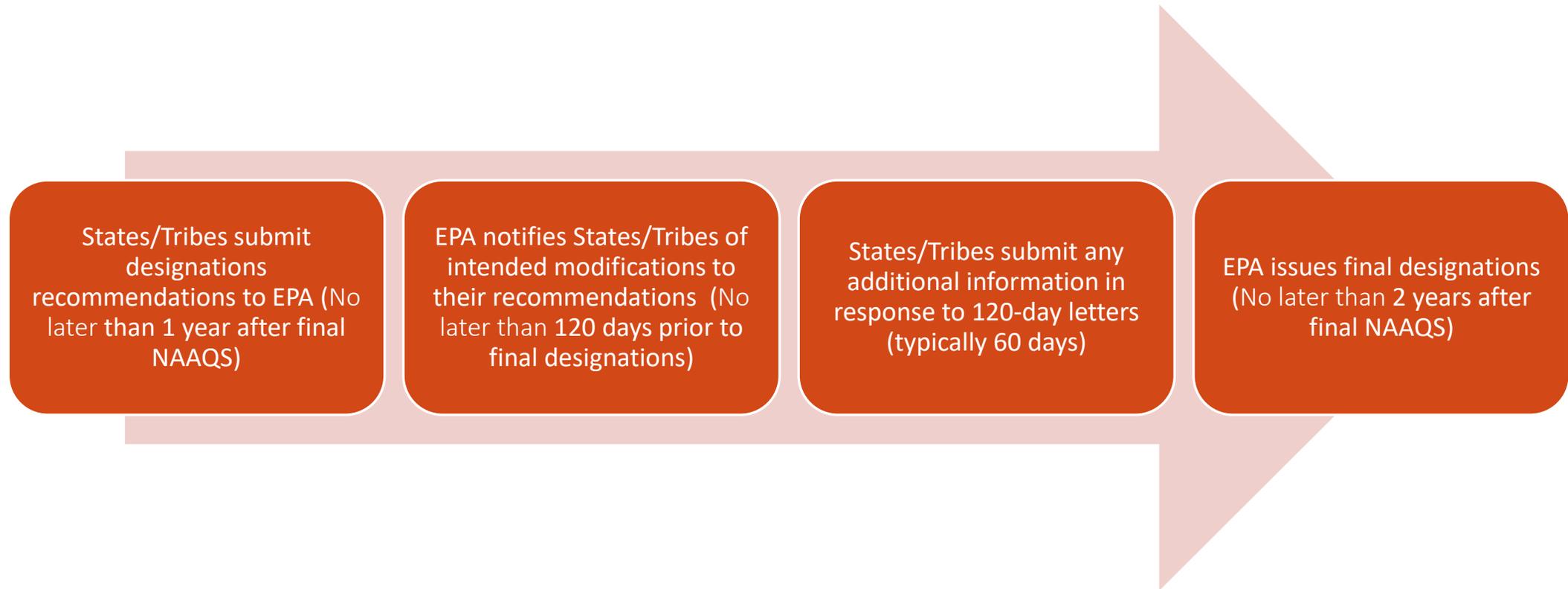
Background

Designations Introduction

- When the EPA establishes a new or revised NAAQS, the Clean Air Act (CAA) requires the EPA to designate all areas of the country, including Indian Country, as to whether the areas are attainment, nonattainment, or unclassifiable.

- CAA section 107(d) governs the initial area designations
  - Identifies and defines the designations categories
  - Provides the process and schedule
  - Establishes roles for the EPA and states

- The EPA generally follows the same process and schedule for Tribes pursuant to CAA section 301(d) Tribal Authority and the Tribal Authority Rule (TAR)

Clean Air Act Designations Categories

- **Nonattainment Area** – An area that does not meet or that contributes to a nearby area that does not meet the NAAQS

  - For $PM_{2.5}$, the CAA provides that all initial areas are classified as "moderate."

- **Attainment Area** – An area that is meeting the NAAQS and is not contributing to a nearby area that does not meet the NAAQS

  - For initial area designations, the EPA uses "Attainment/Unclassifiable" for this category.

- **Unclassifiable Area** – An area that cannot be designated based on available information as meeting or not meeting the NAAQS

Key Steps in the Designations Process

States/Tribes submit designations recommendations to EPA (No later than 1 year after final NAAQS)

EPA notifies States/Tribes of intended modifications to their recommendations (No later than 120 days prior to final designations)

States/Tribes submit any additional information in response to 120-day letters (typically 60 days)

EPA issues final designations (No later than 2 years after final NAAQS)

PM$_{2.5}$ Designations Memorandum

Identifying Nonattainment Areas and Boundary Determinations

- The CAA directs the EPA to designate as nonattainment an area that is violating the NAAQS and nearby areas with emissions that contribute to the violation(s).
  - The analytical starting point for the 2024 annual $PM_{2.5}$ designations process is the entire metropolitan area in which the violating monitor is located (Core Based Statistical Area and Combined Statistical Area).
- The EPA will consider the 3 most recent years of certified, air quality monitoring data.
  - States and Tribes will likely use 2021-2023 data for developing recommendations.
    - Exceptional events demonstrations for events occuring in 2022 and 2023 are due when recommendations are due (i.e., February 7, 2025).
    - At this time, the EPA does not anticipate that exceptional events associated with data year 2021 will have regulatory significance for the designations. Thus, we do not expect air agencies to prepare and submit demonstrations for 2021 event-influenced data. Air agencies should, however, address 2021 event-influenced data when providing their recommendations to EPA.
  - EPA will likely use 2022-2024 for making final designations.

Identifying Nonattainment Areas and Boundary Determinations

- Boundaries for each nonattainment area will be evaluated on a case-by-case basis using a weight of evidence consideration of the five factors.

- The EPA will consider and evaluate the five factors as applied to federal lands, particularly national parks and wilderness areas.

- The EPA will apply principles of national consistency in the designations process and decisions.

Five Factor Analysis

- For nonattainment areas, EPA recommends air agencies base boundary recommendations on an evaluation of the following five factors, which are incorporated into the PM$_{2.5}$ Designations Mapping Tool:
  - Air quality data (e.g., design values, urban increment)
  - Emissions and emissions-related data (e.g., 2022 emissions modeling platform, county and gridded emissions for all PM components)
  - Meteorology (e.g., HYSPLIT)
  - Geography/topography
  - Jurisdictional boundaries

Exceptional Events

- Initial area designations are an action of regulatory significance described in the EPA's "Treatment of Data Influenced by Exceptional Events" Final Rule (81 FR 68216; October 3, 2016)

- Air quality monitoring data affected by exceptional events may be excluded from use in area designations if the data meet the criteria for exclusion, as specified in the Exceptional Events Rule.

- The EPA is committed to ensuring a timely and efficient process for evaluating and making exceptional events determinations.

  o Tools and resources to assist air agencies developing PM-related exceptional events demonstrations and best practice materials can be found at the EPA's exceptional events website located at: *https://www.epa.gov/air-quality-analysis/exceptional-events-analysis-and-visualization-tools*

Anticipated Schedule

Anticipated PM$_{2.5}$ Designations Schedule

Designations Action	Anticipated Date
EPA promulgates 2024 Revised Primary Annual Fine Particle NAAQS final rule	February 7, 2024
States certify 2023 PM$_{2.5}$ data; EPA calculates design values	May 2024
States and Tribes submit their designations recommendations to EPA	No later than February 7, 2025
States certify 2024 PM$_{2.5}$ data; EPA calculates design values	May 2025
EPA notifies states and Tribes concerning any intended modifications to their recommendations (120-day letters); 30- day public comment period begins	Mid-October (120 days prior to final designations)
End of 30-day public comment period	Mid-November 2025
States and Tribes submit additional information, if any, to respond to the EPA's modification of recommended designations	Mid-December 2025
Final designations decisions (without extension)	February 6, 2026

Anticipated Exceptional Events Schedule

Exceptional Events Action	Applicable Data Years*	Anticipated Date
Initial Notifications for Designations Recommendations	2021, 2022, 2023	No later than January 1, 2025
Exceptional Events Demonstration Submittal	2021, 2022, 2023	No later than February 7, 2025
Initial Notification and Exceptional Events Demonstration Submittal	2024	September 30, 2025
EPA Promulgates Final Area Designations	2022, 2023, 2024	February 6, 2026

*States and Tribes are not required to submit completed exceptional events demonstrations for data years that will not be relied upon for final area designations (e.g., data year 2021), but should address any data they believe was influenced by an exceptional event in their area designations recommendations to the EPA.

Initial Area Designations Resources

Key Designations Resources

Website: https://www.epa.gov/particle-pollution-designations

$PM_{2.5}$ Designations Memorandum

$PM_{2.5}$ Designations Mapping Tool

Relevant Datasets

Tribal Policy and Guidance

Exceptional Events Resources

Exceptional Events Website

https://www.epa.gov/air-quality-analysis/treatment-air-quality-monitoring-data-influenced-exceptional-events

AirKnowledge Learning Modules: https://airknowledge.gov/

Fire & Smoke Map: https://fire.airnow.gov/

Questions?

For area-specific questions, please reach out to your EPA Regional Office contacts for more information