



2024 Updates to the PM_{2.5} NAAQS Standard



March 21, 2024
Transportation Air Quality Subcommittee

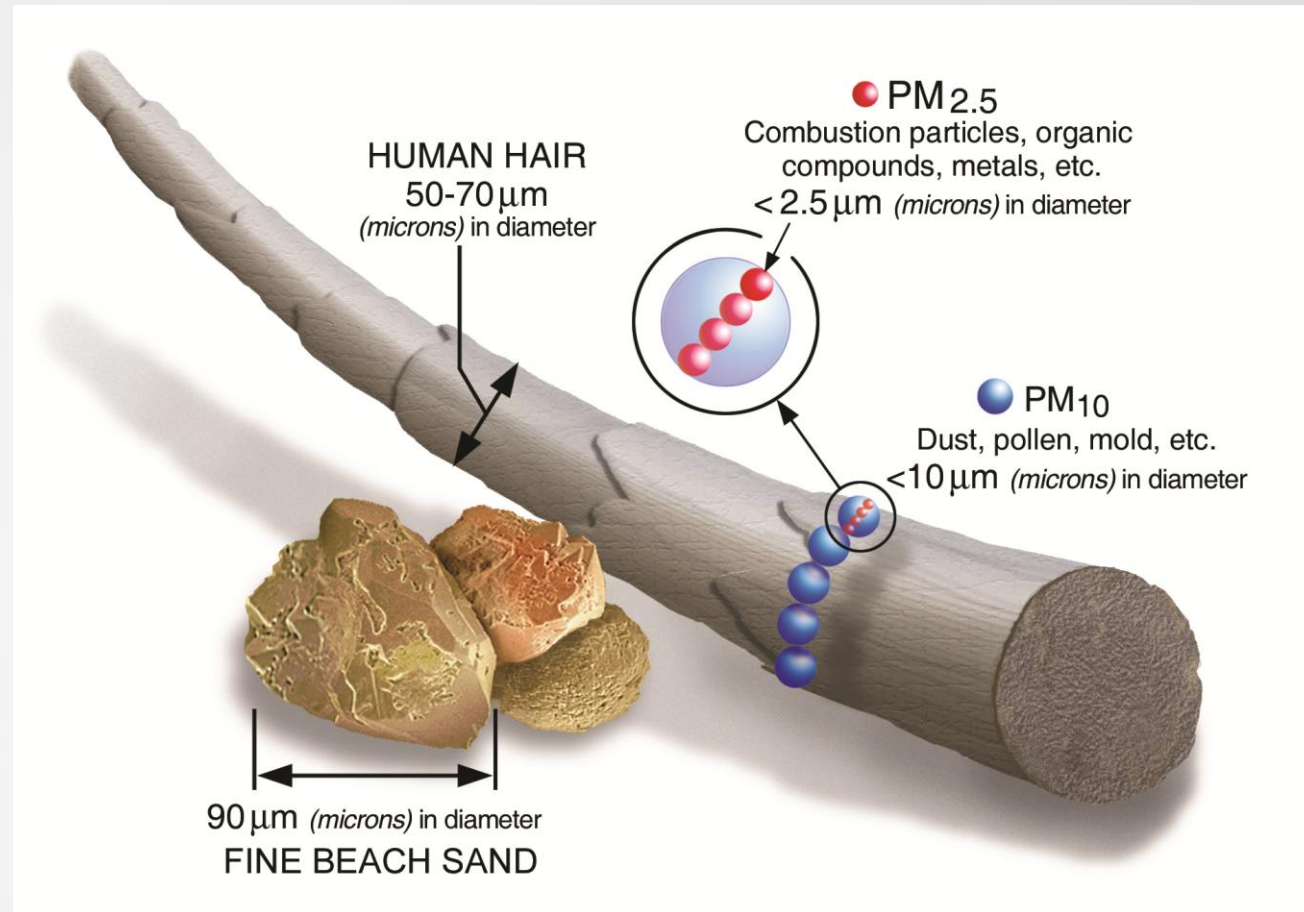
Agenda



1. $PM_{2.5}$ Overview
2. PM NAAQS Standards
3. Our Region's $PM_{2.5}$ Values
4. Timeline

What Is Particulate Matter (PM)

- PM is solid particles or liquid droplets that are in the air.
- Some particles are large/dark enough to be seen by the naked eye: dust, soot, dirt.
- Other particles can only be seen under a microscope.
- PM can be classified as fine particulates or coarse particulates based on size.
- PM can be directly emitted or formed in the atmosphere due to reactions.



PM_{2.5} Sources

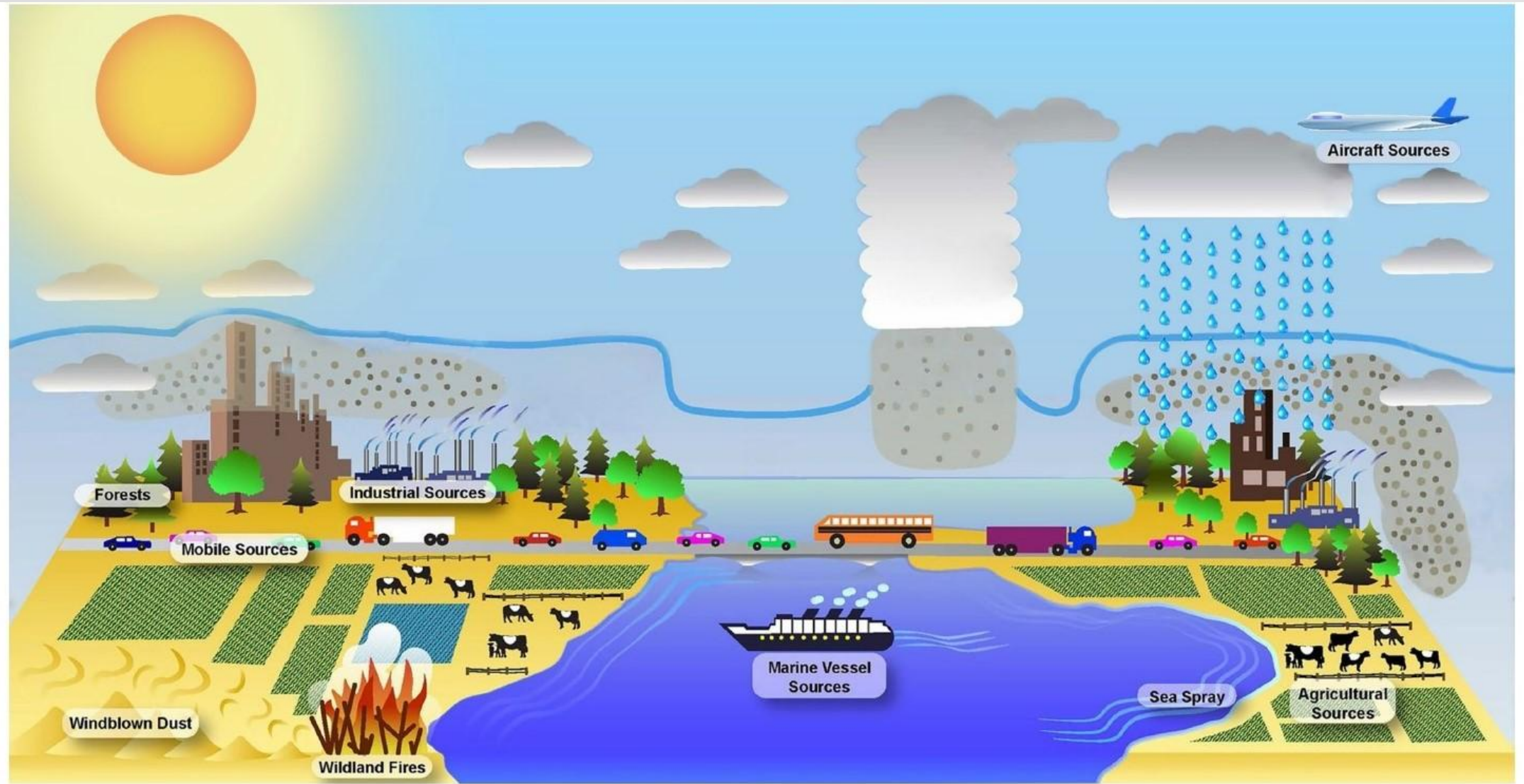


Image Courtesy U.S. EPA with edits by TCEQ

Current Standard: 2012 PM NAAQS

- 2012 PM_{2.5} NAAQS
 - Primary Annual Standard: 12.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)
 - Secondary (Welfare-Based) Annual Standard: 15.0 $\mu\text{g}/\text{m}^3$
 - Primary and Secondary 24-Hour Standard: 35 $\mu\text{g}/\text{m}^3$
- 2012 PM₁₀ NAAQS
 - Primary and Secondary Standard: 150 $\mu\text{g}/\text{m}^3$

New Standard: 2024 PM NAAQS

- On February 7, 2024, the EPA took final action on the reconsideration of the PM_{2.5} NAAQS.
 - Lowered the primary annual standard from 12.0 to 9.0 $\mu\text{g}/\text{m}^3$.
 - Retained the secondary annual standard of 15.0 $\mu\text{g}/\text{m}^3$.
 - Retained the 24-hour standard of 35 $\mu\text{g}/\text{m}^3$.
- The new primary 2024 PM_{2.5} annual standard is expected to become effective in April 2024.

Our Region's PM_{2.5} Design Values

- 2020-2022 annual PM_{2.5} design values that exceed the revised annual PM_{2.5} NAAQS (9.0 μg/m³):
 - Houston North Wayside – 12.6*
 - Houston North Loop – 11.4
 - Clinton Drive – 10.4
 - Houston East – 10.2
 - Baytown – 10.1
 - Houston Aldine – 10.0

- Anticipate an initial “Moderate” designation

Tentative Implementation Timeline

Date	Event
February 7, 2024	PM _{2.5} NAAQS revision finalized
February 7, 2025	State designation submittal
October 9, 2025	120-day Letter from EPA to Governor
February 6, 2026	Final designations effective
Mid 2027	State Implementation Plans Due
December 2032	Anticipated Attainment Date

Questions?

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