

# NEW PM2.5 STANDARD

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# New, Tougher PM2.5 Standard

- EPA published a new standard for fine particles (PM2.5) that becomes effective May 6, 2024.
- This replaces the current annual primary standard set at 12.0 ug/m<sup>3</sup> with a tougher standard set at 9.0 ug/m<sup>3</sup>.
- There were no changes to other PM2.5 standards (daily primary PM2.5, annual & daily secondary PM2.5, and daily PM10).
- Following revisions made to the standard, changes were made to Air Quality Index (AQI).
- Changes were made to PM2.5 monitoring requirements. To enhance protection of air quality in communities subject to disproportionate air pollution risk, EPA is modifying the PM2.5 monitoring network design criteria to include an environmental justice factor. This factor will account for proximity of populations at increased risk of PM2.5-related health effects to air pollution sources of concern.
- Tougher standard will result in significant public health net benefits (\$46 billion in 2032). Health benefits will include up to 4,500 avoided premature deaths, 800,000 avoided cases of asthma symptoms, and 290,000 avoided lost workdays (in 2032). The costs of controls applied toward this standard were estimated to be \$590 million in 2032.

# Attainment Designation

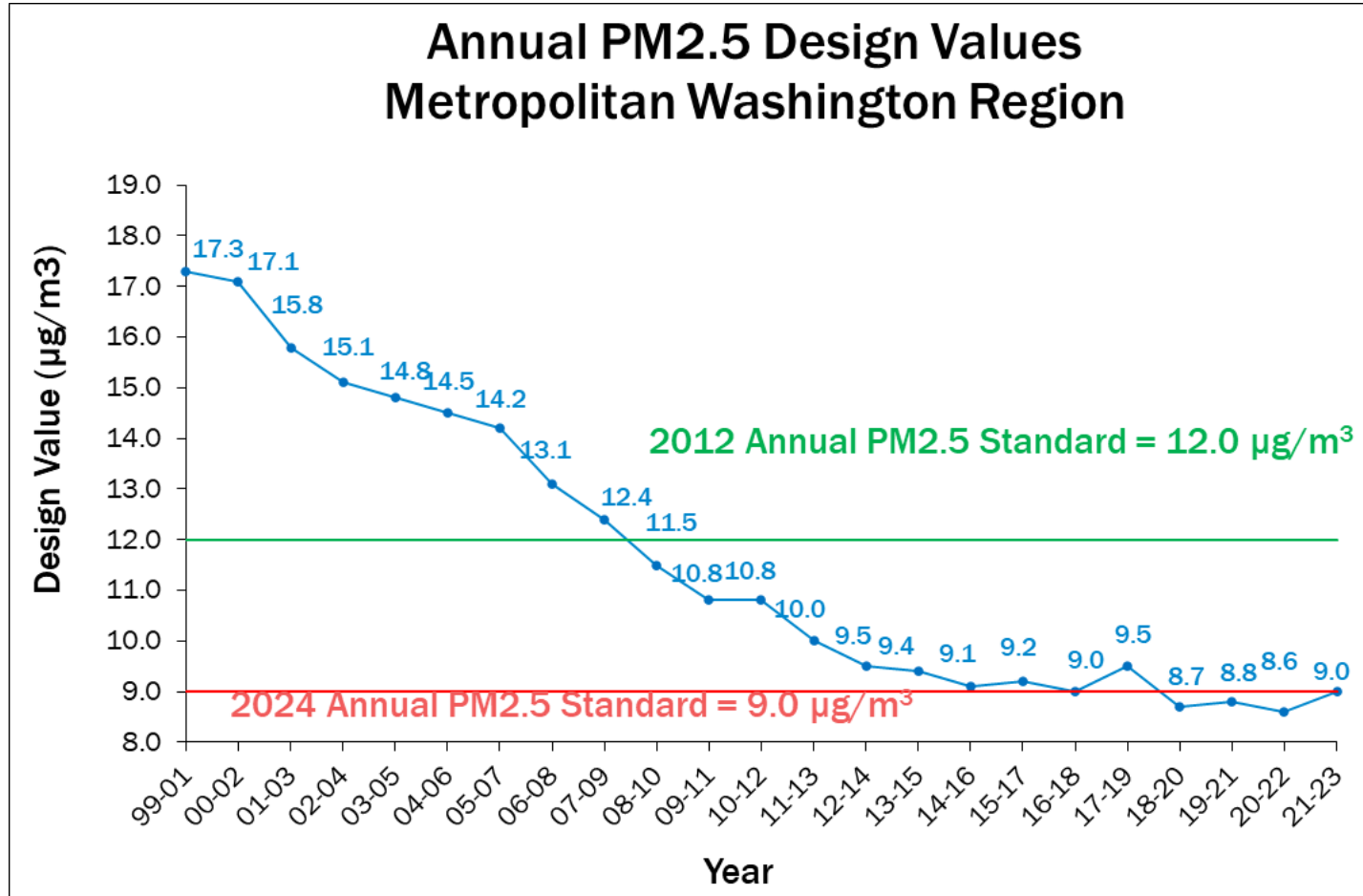
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- Prevention of Significant Deterioration & Nonattainment New Source Review applies upon promulgation of the new NAAQS
- State recommended attainment designation due 1 year from promulgation
- EPA final designations within 2 years from promulgation
- State and EPA attainment designations expected to be based on 2021-23 and 2022-24 data respectively
- EPA's designations will be based on five factors – Air quality data, Emissions and emissions-related data, meteorology, geography/topography, and jurisdictional boundaries
- All nonattainment areas to be designated initially as “Moderate”
- Attainment SIPs due – 18 months from final nonattainment designation date
- Attainment deadline – 6 years from nonattainment designation date (February 7, 2032)

# Wildfires & EE Waivers

- Exceptional events demonstrations deadlines are due based on the data years that will be used for the initial area designations. The deadline for submitting demonstrations to the EPA for the first and second data years is 1 year following promulgation of the NAAQS. The deadline for the third data year used is the last day of the month that is 1 year and 7 months after promulgation.
- EPA plans to ease exceptional events waiver due to wildfires in order to allow attainment of tougher PM2.5 standard
- EPA is promoting the use of intentionally set prescribed fires to reduce the potential for larger, uncontrolled fires and aims to enable waivers from NAAQS compliance for both wildfires and prescribed fires.
- EPA is developing three new products to improve and support an efficient process for demonstrating that air quality data was influenced by exceptional events, when appropriate.
  - Data visualization and comparison tools – Help identify which impacted days affect DVs and whether the events have regulatory significance.
  - PM2.5 Wildfire Exceptional Events Tiering Document - Help right-size demonstrations by identifying the minimum info needed to support the criteria for EE demonstration.
  - Prescribed Fire Demonstration Example

# Annual PM2.5 Design Value Trend



\* 2021-23 data is preliminary and subject to change.



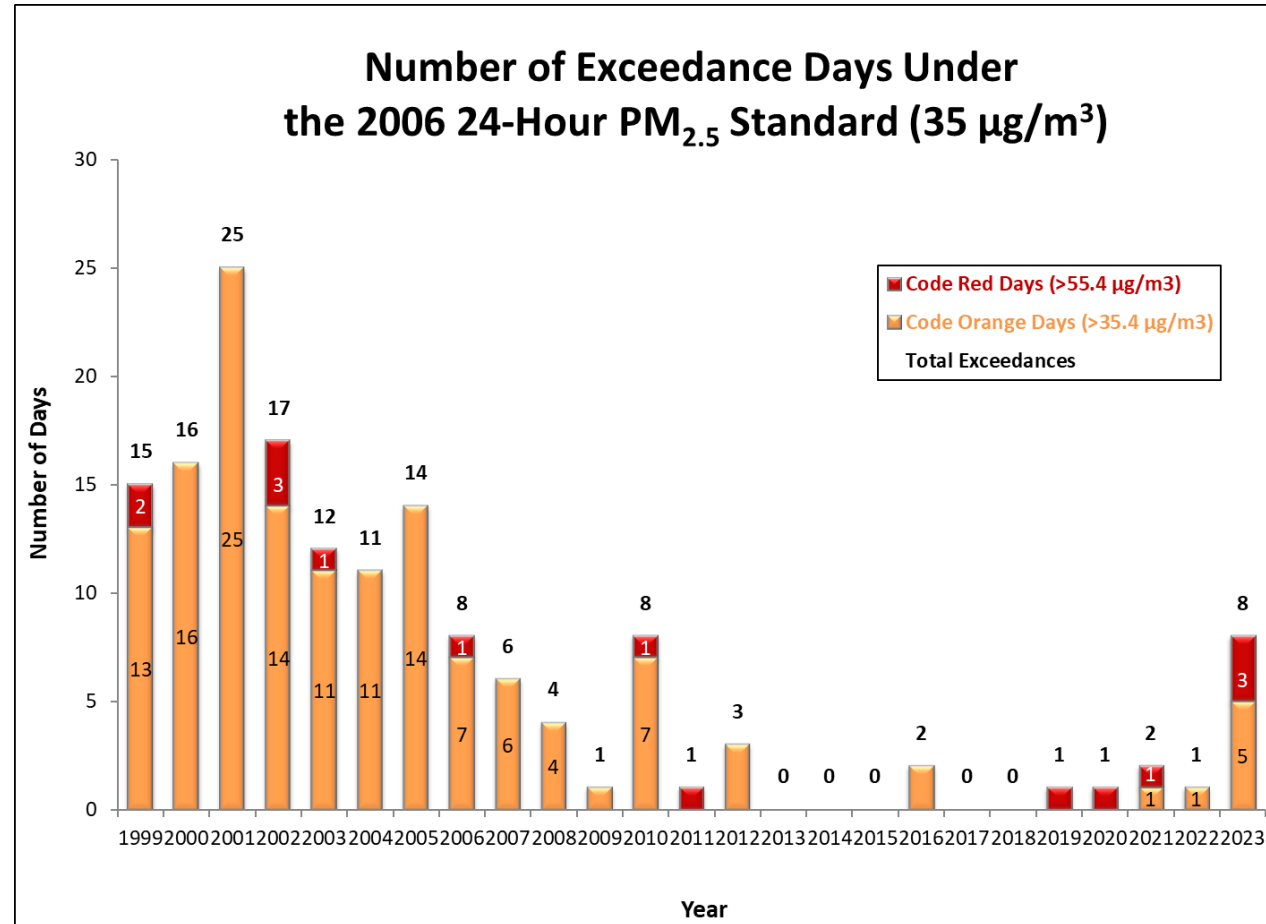
# New AQI

2023 AQI for Fine Particle Pollution <i>(Breakpoints are in micrograms per cubic meter)</i>			
AQI Category and Index Value	Previous AQI Category Breakpoints	Updated AQI Category Breakpoints	What changed?
<b>Good</b> (0 – 50)	0.0 to 12.0	0.0 to 9.0	EPA updated the breakpoint between Good and Moderate to reflect the updated annual standard of 9 micrograms per cubic meter
<b>Moderate</b> (51 – 100)	12.1 to 35.4	9.1 to 35.4	
<b>Unhealthy for Sensitive Groups</b> (101 – 150)	35.5 to 55.4	35.5 to 55.4	No change, because EPA retained the 24-hour fine PM standard of 35 micrograms per cubic meter.
<b>Unhealthy</b> (151 – 200)	55.5 to 150.4	55.5 to 125.4	EPA updated the breakpoints at the upper end of the unhealthy, very unhealthy, and hazardous categories based on scientific evidence about particle pollution and health. The Agency also collapsed two sets of breakpoints for the Hazardous category into one.
<b>Very Unhealthy</b> (201 – 300)	150.5 to 250.4	125.5 to 225.4	
<b>Hazardous</b> (301+)	250.5 to 350.4 and 350.5 to 500	225.5+	

Less code green days  
 More code yellow/red/purple days  
 No change in code orange days

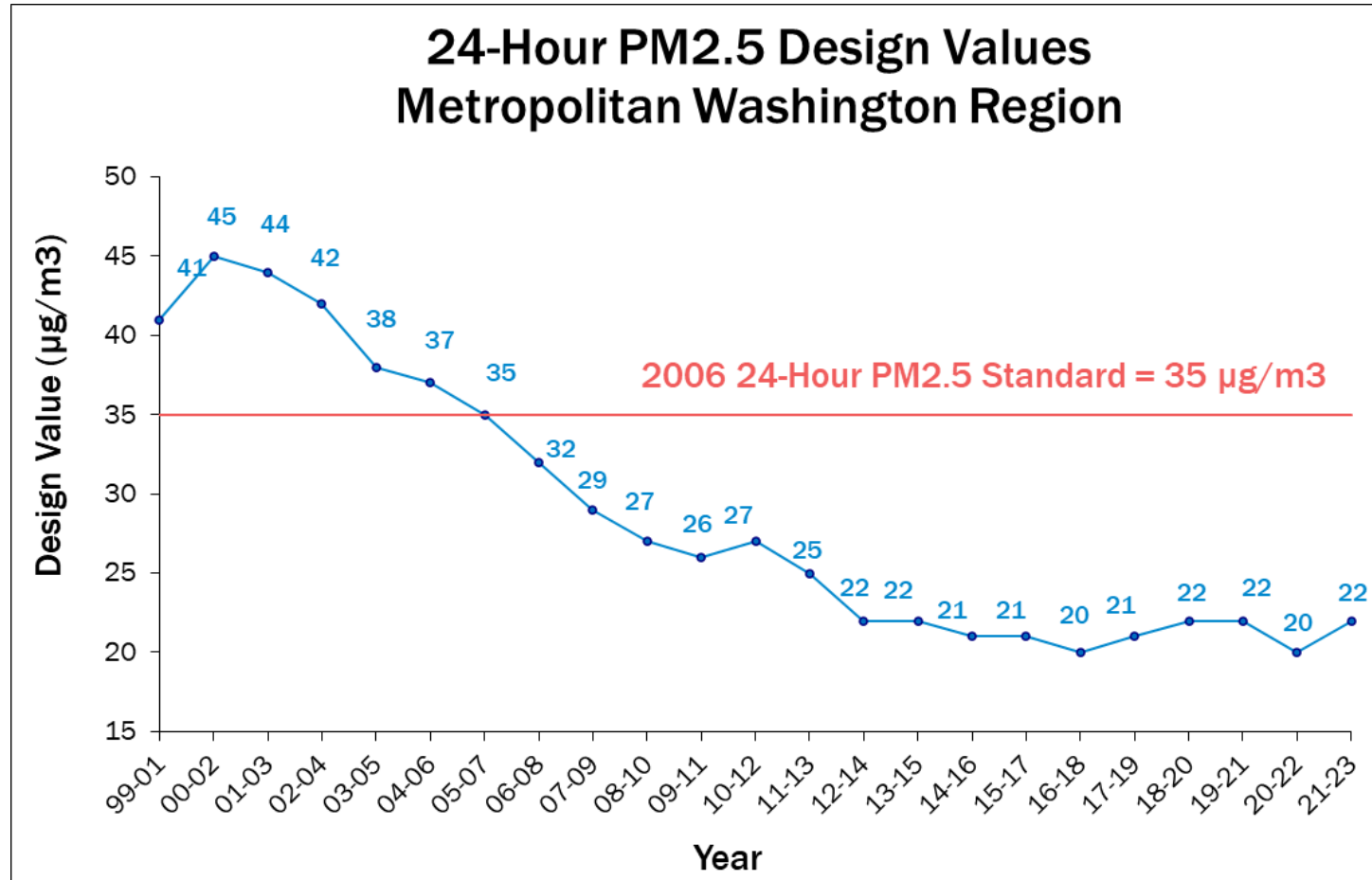


# PM2.5 Exceedance Trend



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# 24-Hour PM2.5 Design Value Trend



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