2024 $PM_{2.5}$ NAAQS Standards

Fact Sheet

What is the new $PM_{2.5}$ standard?

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) is required to review the primary (health-based) and secondary (welfare-based) National Ambient Air Quality Standard (NAAQS) for certain pollutants every five years. On February 7, 2024, EPA lowered the annual fine particulate matter ($PM_{2.5}$) standard in the outdoor air from 12.0 micrograms per cubic meter ($\mu g/m^3$) to 9.0 $\mu g/m^3$. This new standard is effective on May 6, 2024. The daily $PM_{2.5}$ standard (35 $\mu g/m^3$), PM_{10} standard (150 $\mu g/m^3$), and secondary PM standards did not change as part of this reconsideration.

Sources of fine particulate matter include fuel combustion, vehicle exhaust, industrial processes, wildfires and prescribed fires, as well as dust from roads, construction, agricultural and livestock operations.

What is the Air Quality Index?

The Air Quality Index (AQI) is a national air standard rating system developed by EPA for reporting daily air quality. The AQI provides information on the associated health effects that might be of concern at the current levels being measured. The AQI is divided into six categories. Each category is assigned a specific color to make it easier to understand whether air pollution is reaching unhealthy levels. For example, the color orange means that conditions are "unhealthy for sensitive groups," while red means that conditions may be "unhealthy for everyone."

AQI Category and Index Value	Previous AQI Category Breakpoints	Updated AQI Category Breakpoints	What changed?
Good (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
Moderate (51 – 100)	12.1 to 35.4	9.1 to 35.4	
Unhealthy for Sensitive Groups (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.
Unhealthy (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.
Very Unhealthy (201 – 300)	150.5 to 250.4	125.5 to 225.4	
Hazardous (301+)	250.5 to 350.4 and 350.5 to 500	225.5+	

With this new standard in mind, will an increased number of air-quality alert days mean that the air quality in my area is getting worse?

Not necessarily. For example, a day with a daily $PM_{2.5}$ concentration of 10.0 µg/m^3 would have been classified as "Good" (green) under the previous $PM_{2.5}$ standard, but would now be classified as "Moderate" (yellow) under the new $PM_{2.5}$ standard. The air quality (in terms of the amount of particulate matter in the air) would be the same in both instances, but under the new $PM_{2.5}$ standard the AQI would fall into a higher category. In this example, the air quality has not decreased, but the higher AQI category simply reflects a more stringent standard that offers greater protection for public health.

What are the next steps?

EPA will work with the states to designate areas within the state as attainment (meeting) or nonattainment (not meeting) the new standard. For any area(s) that are not meeting the standard, the state will develop and implement a plan to come into attainment within six years.