

The Choices EPA Faces Over the Particulate Matter Standard



Current Standards for PM_{2.5}—15 µg/m³ annual average, and 65 µg/m³ daily average

What might happen and what the impacts would be

The EPA Administrator may pick a level higher than the staff paper recommends, or drop the standard slightly. Although this might look like a tightening of the standard, it would barely touch the problem of particle pollution and would not provide sufficient protection for public health. Data drawn from the draft Staff Paper show that if the EPA Administrator lowers the daily standard from 65 to 35 µg/m³, premature deaths in the nine cities would be reduced by just 22 percent. The current standards only protect 56 million people; lowering it to the top of the options EPA reviewed only protects an additional 9 million.

The Administrator could select a standard at the mid-level of the range, 13 µg/m³ annual combined with 30 µg/m³ daily, and premature deaths could be cut by half.

The Administrator could select a standard that truly protects the public health. In 2002, California proposed a daily standard of 25 µg/m³ and finalized an annual standard of 12 µg/m³. This option, the most stringent analyzed by EPA, *would reduce premature deaths in the nine cities studied by 86 percent.* **This is the option supported by the American Lung Association.**

Options under consideration

EPA Staff Paper

In the Staff Paper, the EPA staff scientists recommended cutting the standards greatly. Two options were presented:

- Option A: Retain the 15 µg/m³ annual standard, while lowering the daily standard to between 25 and 35 µg/m³. In this choice, EPA staff recommended choosing 25 or 30 for the daily standard if the current form of the standard—which exempts the worst 21 days over 3 years—was retained.
- Option B: Lower the annual standard to between 12 and 14 µg/m³, while lowering the daily standard to between 35 and 40 µg/m³.

EPA staff scientists also discussed strengthening the “form” of the standards. The “form” establishes how many times and how frequently a county can have higher levels of pollution than the standard level when calculating compliance.

The CASAC Recommendation—13-14 µg/m³ annual and 30-35 µg/m³ daily

The independent scientists advising EPA, the Clean Air Scientific Advisory Committee, or CASAC, recommended that both the daily and annual average standards for PM_{2.5} be dropped to provide increased public health protection. Specifically, the panel endorsed an annual average standard between 13 and 14 µg/m³ combined with a daily standard PM_{2.5} standard between 30 and 35 µg/m³. This narrows the EPA staff-recommended range, and lowers the upper end of the range, potentially providing increased public health protection for 16 million additional Americans.

The American Lung Association Recommendation—12 µg/m³ annual and 25 µg/m³ daily

The **American Lung Association favors** an annual standard of no higher than 12 µg/m³ combined with a daily standard of no higher than 25 µg/m³ (99th percentile form to allow fewer high pollution days to be excused when calculating compliance).

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Letter from 104 leading air pollution scientists—12 $\mu\text{g}/\text{m}^3$ annual and 25 $\mu\text{g}/\text{m}^3$ daily

In addition, 104 leading air pollution researchers sent a letter to EPA and CASAC stating that strengthened standards at 12 $\mu\text{g}/\text{m}^3$ annual and 25 $\mu\text{g}/\text{m}^3$ daily, were based on sound science.

A New Coarse Particle Standard?

EPA staff has recommended, and CASAC has endorsed, a new standard for “coarse” particles that are also small enough to be inhaled into the thoracic region of the lungs. Called $\text{PM}_{10-2.5}$, coarse particles are smaller than PM_{10} but larger than $\text{PM}_{2.5}$. Particles of this size range are associated with respiratory illness. CASAC has recommended that EPA focus implementation of this standard in urban areas. The American Lung Association supports this standard being applied in all areas of the country, not just urban areas.

Next Steps

EPA is under a Consent Decree to issue a proposed rule by December 20, 2005, and a final rule by September 27, 2006.