



Clearing the Air: Particle Pollution Standards at an Inflection Point

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The nation is on the cusp of a new lifesaving safeguard: stronger limits nationwide on dangerous particulate matter air pollution. These stronger limits will drive air pollution cleanup in communities across the country, preventing asthma attacks and saving lives.

But as stronger standards are almost across the finish line, polluting industries are pushing back. Some are spreading misinformation in hopes of preventing stronger new limits that would keep people healthy.

Cleaning up Particle Pollution Will Save Lives

The American Lung Association's mission is to save lives by improving lung health and preventing lung disease. Stronger limits on particle pollution will do just that.

Our ["State of the Air" reports](#) show that the air over time has gotten much cleaner, thanks to measures implemented under the Clean Air Act.¹ But it's not yet as clean as it needs to be to keep everyone healthy. Tens of millions of people live with unhealthy levels of particle pollution. This pollution comes from gas- and diesel-powered vehicles, coal power plants, industrial facilities, woodstoves, wildfires and more. People who live near these sources, or near highways, railyards or ports, get a bigger dose of this dangerous pollution.

Particle pollution is dangerous both in short-term spikes and in long-term, lower-level exposure. It causes serious respiratory and cardiovascular harm, cancer and premature death. It's especially dangerous for fetuses, babies and kids; seniors; and people with lung and heart disease. It's also a health equity and environmental justice issue: people of color are disproportionately impacted by the health harms of particle pollution.

The Law is Smart and Science-Based

The Clean Air Act is a lifesaving law with a long history. One of its requirements is that the U.S. Environmental Protection Agency (EPA) set national limits on dangerous outdoor air pollutants – called the National Ambient Air Quality Standards (NAAQS). These standards are the legal limits on how much of these pollutants can be in the air. If a community's air has too much of one of these pollutants, they work with EPA and their state to create and implement a plan to clean up emissions.

The reason these standards are so successful is that they are required to be based on what the current scientific research shows is an acceptable level of that pollutant to breathe. And because the people who wrote the Clean Air Act knew that the science is always changing, the

law also requires that EPA review the science every five years and revise the standards if they no longer match what the research shows is safe to breathe.

Also, since these are health-based standards, EPA is *not* allowed to consider anything except health science when it sets the standards. That is because considerations like costs and technological feasibility are built into the process later during implementation, when states write their plans to clean up pollution in places where the levels are too high. That way, the nation collectively works toward achieving pollution levels that the science shows are acceptable.

EPA is Considering Standards that Would Prevent Thousands of Premature Deaths

The Lung Association and other leading national health organizations – including the American Medical Association, the American Academy of Pediatrics and the American Public Health Association – have reviewed the research and agree with EPA’s Clean Air Scientific Advisory Committee that more protective standards are needed to best protect health for people with lung disease and promote pollution cleanup in areas facing environmental injustice.² There is a strong scientific record supporting the most protective levels.³ EPA proposed a range of 9-10 $\mu\text{g}/\text{m}^3$ for the annual standard and no update for the 24-hour standard, and took comments on more protective levels of 8 $\mu\text{g}/\text{m}^3$ for the annual standard and as low as 25 $\mu\text{g}/\text{m}^3$ for the 24-hour standard.

EPA’s own analysis shows that stronger standards would have huge benefits to health and environmental justice. They projected the potential impacts to health of standards at different levels and found that stronger standards offer major additional health benefits.⁴

Annual/24-hour standards levels	10/35 $\mu\text{g}/\text{m}^3$	10/30 $\mu\text{g}/\text{m}^3$	9/35 $\mu\text{g}/\text{m}^3$	8/35 $\mu\text{g}/\text{m}^3$
Adult premature deaths avoided	1,700	1,900	4,200	9,200
Asthma symptoms	310,000	350,000	740,000	1,600,000
Lost work days	111,000	130,000	270,000	580,000

What’s more, EPA’s analysis shows that tighter standards would have the most benefits for people of color. EPA’s Regulatory Impact Analysis predicts a substantial risk reduction for Black residents with a decrease in the level of the annual standard to 9 $\mu\text{g}/\text{m}^3$ or lower. It shows that that an annual standard of 8 $\mu\text{g}/\text{m}^3$ saves seven times more Black lives per every 100,000 individuals every year from air pollution-related mortality than a standard of 10 $\mu\text{g}/\text{m}^3$.⁵

There is no level of fine particulate matter that the science has shown is safe. That is why it’s so critical that EPA follow the recommendations of its own independent scientists and finalize the strongest possible standards in 2023.⁶

Industry Pushback is Predictable and Easily Debunked

Every time EPA goes through the process of updating the air quality standards, the same arguments get recycled to oppose them – false and exaggerated claims that industry cannot possibly clean up to meet the standards and eye-popping, inaccurate claims about the number of counties that will be in nonattainment and the purported ramifications of nonattainment designations. And then, every time EPA finalizes stronger standards and implements them, those same industries do clean up, the economy continues to grow and the air gets cleaner.



For example, we often hear about air pollution and the economy, with false claims based on cherry-picked data. A 2023 report from the National Association of Manufacturers came up with a wildly inflated number of economic activity “exposed” to impacts from stronger standards. The report looked at places that would have to clean up under a more protective standard of 8 $\mu\text{g}/\text{m}^3$, then simply tallied up all the manufacturing economic activity in those places. These numbers have nothing to do with the actual cost of reducing particulate matter pollution nor will all these manufacturers be required to install and operate new pollution controls. The report explicitly states multiple times, “This is not a projection of the likely impact of a tighter $\text{PM}_{2.5}$ standard.” But that qualifier did not appear in the TV ads, media releases or many other publicly available documents using the report.⁷

A recent letter from several trade associations omits that key qualifier in making a doomsday claim the report does not actually support. It also makes another key omission. The letter notes, “Our members have innovated and worked with regulators to lower $\text{PM}_{2.5}$ concentrations significantly, and further progress is being made as part of the energy transition investments. The EPA recently reported that $\text{PM}_{2.5}$ concentrations have declined by 42% since 2000, driven by major emissions reductions from both

mobile sources and the power sector. As a result, America’s air is cleaner than ever.” Missing from National Association of Manufacturers’ quote is the fact that clean air progress occurred thanks to increasingly strong National Ambient Air Quality Standards – and that they vehemently opposed those updated standards that led to the progress they are now celebrating.⁸

Another 2023 report, from the U.S. Chamber of Commerce, is premised on a deeply flawed and misleading methodology. It falsely claimed that wildfire smoke would mean that communities nationwide would fail to meet the standards.⁹ This is not how the law works. Under the Clean Air Act, communities can ask EPA to not “count” a high-pollution day in determining whether their air meets the national standards or not. Such days are called an “exceptional event,” and it’s a key tool that communities use every year to exempt days affected by events like wildfires. The law recognizes that these types of events are far more outside of a community’s control than the pollution from smokestacks or vehicles within their borders. The law also provides for communities to use this same process to allow for prescribed fire, which the American Lung Association supports as a tool used under the right circumstances to avoid worse, catastrophic fires in future.¹⁰

That same Chamber report also ignores how permitting of large new polluting facilities works when stronger NAAQS are being implemented. While the report claims to project which places would need to institute cleanup measures, it actually uses substituted data and different methods from what EPA will use. It misrepresents the permitting obligations on facilities and the process. Under the Clean Air Act, in communities with unhealthy levels of pollution, large new facilities and existing facilities that make modifications that would increase emissions are required to install and operate modern pollution controls and offset their emissions. As discussed more below, we have seen time and again that this permitting system results in economic growth and air quality improvement.

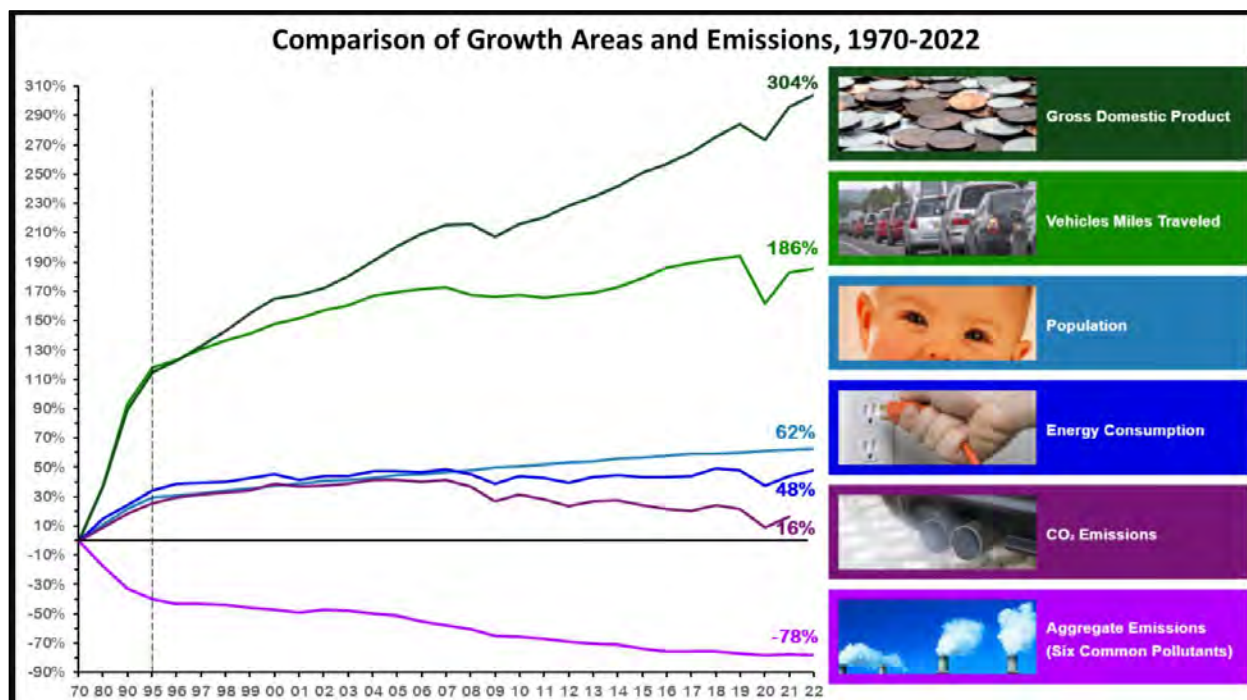
“Missing from National Association of Manufacturers’ quote is the fact that clean air progress occurred thanks to increasingly strong National Ambient Air Quality Standards – and that they vehemently opposed those updated standards that led to the progress they are now celebrating.”



As for areas whose air meets the standard, large new facilities being built, or existing facilities making modifications that would increase emissions, have to estimate their emissions ahead of time and install and operate modern emissions controls to receive a permit.¹¹ If these large facilities encounter difficulties showing compliance with air quality standards, EPA provides them a pathway forward: they can offset their emissions and proceed with construction.

Clean Air and a Strong Economy Go Together

The nation does not have to choose between healthy air and a healthy economy. In 2011, EPA provided to Congress an assessment of the [costs and benefits of the Clean Air Act](#) over the twenty years from 1990 to 2010. EPA calculated that the benefits exceeded the costs by a minimum of \$3 for every \$1 spent. The benefits may also have been as much as \$30 to \$90 for every \$1 spent. Furthermore, we have more than 50 years of evidence to show that the economy has improved even as we have cut pollution. The economy (gross domestic product) grew more than 300% from 1970 through 2022, while aggregate pollution has been cut by 78% (see [this chart prepared by EPA](#)).¹²



A 2023 [Earthjustice analysis](#) compared real GDP, unemployment rates, and PM_{2.5} and ozone pollution air quality indices across 14 wide-ranging metropolitan areas, many of which have been designated nonattainment, from 2012 to 2021, and found that unemployment rates went down, GDP went up, and air pollution went down at the same time.¹³

Having to Clean Up Air Pollution Isn't the Problem – Air Pollution Itself Is

When an area does not attain the air pollution levels set by the air quality standards, it is considered to be in “nonattainment.” Being designated in nonattainment is not the problem; having pollution levels that harm public health is the problem. A nonattainment designation tells the public the truth about pollution in a community that threatens its health. Nonattainment is a critical step to unlock the health protections of the Clean Air Act and for the area’s communities



to ensure that polluting sources are cleaned up, which has real benefits to residents' health. Furthermore, residents have a right to know when the air they are breathing is unhealthy.

The measures communities take to meet the standards are time-tested, commonsense and reasonable, including ensuring that vehicles meet emission requirements and that big polluters are employing control measures that are economically and technologically feasible.

The Biden Administration Must Finalize Standards that Adequately Protect Health, Period.

The bottom line is that EPA is legally required to set air quality standards at the level that protects health. The official Clean Air Scientific Advisory Committee and the broader health and medical community are clear in their guidance to follow the science and update the particulate matter standards to where they need to be to safeguard health. EPA Administrator Michael Regan must strengthen the particulate matter NAAQS without further delay. Our health demands it.

¹ American Lung Association. (2023). State of the Air. <https://www.lung.org/research/sota>

² American Lung Association *et al.* (Mar 28, 2023). [Comment on EPA's Proposed Rule in the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter](#) (Docket #EPA-HQ-OAR-2015-0072); Comment ID: EPA-HQ-OAR-2015-0072-2348, Tracking #: lft-03xd-ensu.

³ Clean Air Scientific Advisory Committee (CASAC). (Mar 18, 2022). [CASAC Review of EPA's Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter \(External Review Draft – October 2021\)](#). Report # EPA-CASAC-22-002

⁴ U.S. EPA. (Jan 6, 2023). [Regulatory Impact Analysis for the Proposed Reconsideration of the National Ambient Air Quality Standards for Particulate Matter](#)

⁵ *Ibid.* [Regulatory Impact Analysis for the Proposed Reconsideration of the National Ambient Air Quality Standards for Particulate Matter](#).

⁶ CASAC. (Mar 18, 2022). [Review of EPA's PA for PM_{2.5} NAAQS Reconsideration](#).

⁷ Business community Letter to White House Chief of Staff urging EPA maintain existing NAAQS for fine particulate matter. (2023). <https://www.globalenergyinstitute.org/sites/default/files/2023-11/PM2.5%20Industry%20letter.pdf>.

⁸ National Association of Manufacturers (NAM). (Apr, 2023). NAM report on U.S. air quality standards and the manufacturing sector. https://documents.nam.org/COMM/NAM_Air_Quality_Standards_Analysis_Web_Version.pdf

⁹ U.S. Chamber of Commerce (2023). EPA's Proposed Air Quality Standards Will Cause Permitting Gridlock Across Our Economy. <https://www.globalenergyinstitute.org/sites/default/files/2023-11/Chamber%20PM2.5%20Report%20-%2011.8.23%20Final%20Draft.pdf>

¹⁰ Johnson, Seth (2023). "Chamber of Commerce's Dubious Analysis of Clean Air Rules Is Wrong." Earthjustice. <https://earthjustice.org/experts/seth-johnson/chamber-of-commerces-dubious-analysis-of-clean-air-rules-is-wrong>

¹¹ *Ibid.* [Johnson, Seth \(2023\)](#).

¹² U.S. EPA. "Comparison of Growth Areas and Emissions, 1970-2022." <https://www.epa.gov/system/files/images/2023-05/Baby%20Graphic%201970-2022.png>

¹³ Winz, Robyn (2023). "Putting Industry Claims to Rest: Data Reveals Economic Success Amidst Clean Air Rules." Earthjustice. <https://earthjustice.org/experts/robyn-winz/putting-industry-claims-to-rest-data-reveals-economic-success-amidst-clean-air-rules>

