
After years of waiting, people across the U.S. are finally celebrating a stronger limit on dangerous particulate matter air pollution. The new stronger standard will drive air pollution cleanup in communities across the country, preventing asthma attacks and saving lives.

But now that a stronger limit is across the finish line, the critical work of implementing it begins – and polluting industries are pushing back. Some are spreading misinformation in hopes of avoiding cleanup or filing lawsuits. They are even trying to get Congress to pass legislation that would prevent the public from receiving the health benefits of the new standards—or potentially any stronger standards.

## EPA's New Particle Pollution Limit Will Prevent Thousands of Premature Deaths

The American Lung Association's mission is to save lives by improving lung health and preventing lung disease. The new, stronger limit on particle pollution that the U.S. Environmental Protection Agency (EPA) finalized in February 2024 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 gasoline- and diesel-powered vehicles, coal and gas 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 deadly 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, 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.

In 2024, EPA strengthened the annual limit on particulate matter from 12 micrograms per cubic meter ($mg/m^3$) to 9 $mg/m^3$. EPA estimates this will result in benefits - in the year 2032 alone - up to:

- 4,500 premature deaths avoided
- 800,000 cases of asthma symptoms avoided
- 290,000 lost workdays avoided
- $46 billion in health benefits to the public

This updated standard was necessary. 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 – reviewed the research and agreed that more protective standards were needed to best protect health for people with lung disease and promote pollution cleanup in areas facing environmental injustice.[2] The independent experts on EPA's Clean Air Scientific Advisory Committee agreed that stronger standards were necessary.[3]

## The Law is Smart and Science-Based

The new particle pollution limit was required by the Clean Air Act. Here's how: the Clean Air Act is a lifesaving law with a long history. One of its requirements is that the 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 new, stronger annual limit on particulate matter is one of the NAAQS.

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 members of Congress who wrote the Clean Air Act knew that the science is always advancing, 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.

Since these are health-based standards, EPA is required to consider only the 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 adequately protect public health.

The Clean Air Act has a decades-long track record of success cleaning up pollution, but the work isn't done yet. Keeping these provisions in place – and opposing efforts to weaken or block them – is critical to protecting health from air pollution for the long term.

## Implementation of the Standard is a Time-Tested, Reasonable Process

Now that the new standard is final, the work of implementing it begins. This process is critical for ensuring that the projected lifesaving benefits of the standard become reality.

The NAAQS implementation process is governed by the Clean Air Act and involves states, local air quality management agencies, Tribal nations and EPA. Within one year of the new particle pollution standard's finalization, states and Tribes will submit recommendations to EPA on whether or not areas within their jurisdiction are attaining the new standard, based on air quality data collected from monitors.

Then, the next step is for EPA to review the air quality data and the state and Tribal recommendations and then make designations. If the air quality in a geographic area meets or is cleaner than the NAAQS, EPA will designate the area as being in attainment of the standard (Geographic areas are determined by looking at factors like jurisdictional boundaries and topographical and meteorlogical data). The areas that do not meet the NAAQS are designated as nonattainment areas. Those areas that do not have adequate data to determine their attainment status are designated "unclassifiable."

Once the designations take effect, state and local governments develop State Implementation Plans (SIPs). For places that have too much particle pollution – those designated "nonattainment" – part of the nonattainment SIPs identify the specific emissions control requirements the state will rely on to attain and/or maintain the NAAQS. These SIPs contain control requirements like installing and operating pollution controls on power plants and incinerators and limiting woodburning on poor air quality days.

The process of implementing the standards is responsive to state and local situations and air quality challenges. SIPs are developed by the states, with input from the public. That's because the best opportunities for emissions reductions in the Midwest may not be the same for the Western U.S. and vice versa. The flexibility and individuality of the SIPs is what makes the implementation process work so well. And EPA is rolling out new resources, maps and tools to help states develop the best possible SIP to achieve the required amount of emissions reductions.

Attainment designations for the new particle pollution standard will likely be finalized in early 2026 and will likely include monitoring data from 2022, 2023 and 2024. However, EPA projected in the final rule that of the counties that may not meet the new annual standard, the vast majority will attain the standard by the likely legal deadline of 2032 with just the existing pollution reductions that EPA is implementing now.

That's because EPA's other rulemakings and investments will help communities across the country attain the stronger particle pollution standards. For example, new nationwide rules to clean up cars and trucks and further cut down on emissions from power plants will help reduce emissions that form particle pollution from these sources. EPA is also implementing investments from the Bipartisan Infrastructure Law and Inflation Reduction Act that further reduce emissions by aiding in the transition to zero-emission technology, such as replacing diesel school buses with electric ones, providing tax incentives for electric vehicles, building out EV charging infrastructure and building out more clean, renewable electricity. These actions all help reduce particle pollution.

## As Always, Permitting of New Sources Will Continue Under the Stronger Standards

Arguments from industry that the stronger standards will prevent new construction are nothing new. The reality is the Clean Air Act lays out permitting programs that ensure that industry can build and expand without adding to the burden of pollution in their area. The New Source Review (NSR) program offers two different pathways depending on whether an area meets or does not meet the NAAQS for a given pollutant.

In an area that meets the standard or hasn't yet been designated, NSR ensures that when a big industrial source is being built or making modifications or upgrades, it will not contribute to violations of the NAAQS. The source has to document a Prevention of Significant Deterioration (PSD), meaning it must install and operate modern, effective and available pollution controls to ensure it won't contribute to violations of the particle pollution standard. The process provides sources significant flexibility in how they design their facilities and control their emissions. EPA works with states, localities and Tribes to make this process work.

Under the updated annual PM standard, these provisions kicked in on May 6 – 60 days after the final standard was published in the Federal Register. This means that across the country, big new polluting sources that are planning to start construction, or existing polluting sources planning a modification, will have to install and operate pollution controls to ensure they don't

pollute enough to make their area violate the new standard. This requirement is the subject of fear-mongering from opponents of the new standard. Some have conflated the requirements that kicked in on May 6 with the requirements of writing and meeting a State Implementation Plan if the area is later designated nonattainment. The latter is years down the road; for now, new sources – which already had to get permits – simply have to make sure those permits reflect the new particulate matter limit.[4] 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.

Not only is this protective of health, it's also commonsense. Ensuring modern pollution controls are installed on facilities being built now will help states meet their pollution reduction obligations later, including by potentially keeping them in attainment.[5]

This process isn't new; it was successfully employed the last time EPA updated the annual particle pollution standard in 2012, with a wide array of projects using cost-effective emissions controls to obtain permits. EPA has since updated its guidance and other resources to make the process even easier this time.[6]

Once areas are designated nonattainment, a similar New Source Review permitting process will kick in for those areas to determine how new facilities can be built and existing facilities can make modifications (Areas designated attainment continue under the Prevention of Significant Deterioration permitting program). 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. This means ensuring that existing polluting sources in the area reduce their emissions the same amount that the new or modified facility will add.

A 2023 Chamber of Commerce report misleads on both the facts and the law.[7] 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 uses. It misrepresents the permitting obligations on facilities and the process. The reality is this: we have seen time and again that this permitting system results in economic growth and air quality improvement simultaneously.[8]

Opponents of the new standards also claim, paradoxically, that the New Source Review process *prevents* pollution control. For example, a March 2024 op-ed falsely claimed that plants operating pollution controls may see hourly emissions increases (triggering permitting processes) even though annual emissions decline.[9]

Things the op-ed doesn't mention: first, the EPA report they cite is from 2002 – a report that was false to the tune of two successful lawsuits challenging the false claim that permitting rollbacks leads to cleaner air overall. Second, simply running plants more efficiently does *not* mean they pollute less. In fact, research has shown that by limiting actions to just improving the efficiency of existing plants, plants would actually run *more* often resulting in an estimated annual 3% increase in harmful air pollution.[10]

## Tired Claims about "Background" Levels are Unfounded

One frequent claim when the NAAQS are updated – for particle pollution and for other pollutants – is that the standards are too close to "background levels" to allow for cleanup.[11] Under the Clean Air Act, this is pollution "formed from emissions other than U.S. anthropogenic emissions."[12] The implementation of the NAAQS is designed to respond to the circumstances

of each area with unhealthy levels of a given air pollutant. The law lays out pathways for areas to seek exemptions for exceedances of the standard due to "background" levels.[13] States can also receive exemptions for instances of pollution being transported from outside the U.S. Too often, opponents of stronger standards seek to undermine the entire process of setting or implementing the standards because of the individual circumstances of a specific location.

## Addressing Wildfires is Critical – and EPA Provides a Path to Doing So under the New Standards

The misleading 2023 Chamber of Commerce Report also spreads misinformation about how wildfire smoke is addressed under the Clean Air Act. It falsely claims that wildfire smoke would mean that communities nationwide would fail to meet the standards.[14] Thankfully, the Clean Air Act has a process to address this. Its "exceptional events" provision allows states to write off air quality monitoring data for days when air pollution levels spike because of a natural event (or a one-time human-caused event) that isn't reasonably controllable or predictable. It's a key tool that communities use every year to avoid having their attainment status be affected by days where air quality was hampered 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 if air quality is harmed in a regulatorily meaningful way by prescribed fire, which the American Lung Association supports as a tool used under the right conditions to mitigate the risk of worse, catastrophic wildfires in the future.[15]

EPA has built out several new resources over the past few years to help states address this topic as it applies to the NAAQS. In 2016, EPA issued final rules on exceptional events that further clarified how wildfire and prescribed fire can qualify. The 2016 rule also added a mitigation plan requirement to address repeated air pollution events. Under the rule, areas that experience an event (of the same type and pollutant) that recurs three times in a three-year period must submit mitigation plans that include (i) public notification and education programs for potentially affected communities, (ii) steps to identify, study, and implement mitigating measures and (iii) periodic review of the mitigation plan.[16]

Some forest management groups and members of Congress have expressed concern that the new, stronger air quality standards would make it more difficult for land managers to implement prescribed fire at the scale needed to mitigate wildfire risk.[17] However, research shows that lack of capacity, funding, resources and coordination challenges across federal, state, and local agencies are the most significant barriers to implementing prescribed fire. Air quality standards, including the Clean Air Act, were *not* found to be a primary barrier to increasing use of prescribed fire.[18] Furthermore, the federal Wildland Fire Mitigation and Management Commission came to a consensus in its recent recommendations to Congress that there are "opportunities to work within the Clean Air Act and the associated regulatory systems and processes to accommodate both increased use of beneficial fire and protection of public health from smoke impacts."[19]

EPA and other federal agencies are actively working to address these challenges. For example, in November 2023, EPA, the Department of Interior, the Department of Agriculture and the Centers for Disease Control and Prevention signed a Memorandum of Understanding in which they agreed to work together to develop a more efficient pathway for states to submit

exceptional events demonstrations and accompanying guidance.[20] Since then, EPA has worked with the U.S. Forest Service, California and relevant air districts to develop an exceptional events demonstration for prescribed fire that can serve as an example for state and local agencies when a prescribed fire causes an exceedance of the standard.[21] The agency is also developing prescribed fire demonstration FAQs, a demonstration template and example analyses for clear causal relationship demonstrations that will help facilitate exceptional event demonstrations when appropriate.

## All in All, Industry's "Sky is Falling" Claims are Baseless

Every time EPA updates 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. Despite their griping, those same industries ultimately do clean up, the economy continues to grow and the air gets cleaner.

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 standard of 8 $mg/m^3$, which is tighter than what EPA adopted, 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 $PM_{2.5}$ standard." But that qualifier did not appear in the TV ads, media releases or many other publicly available documents using the report.[22]

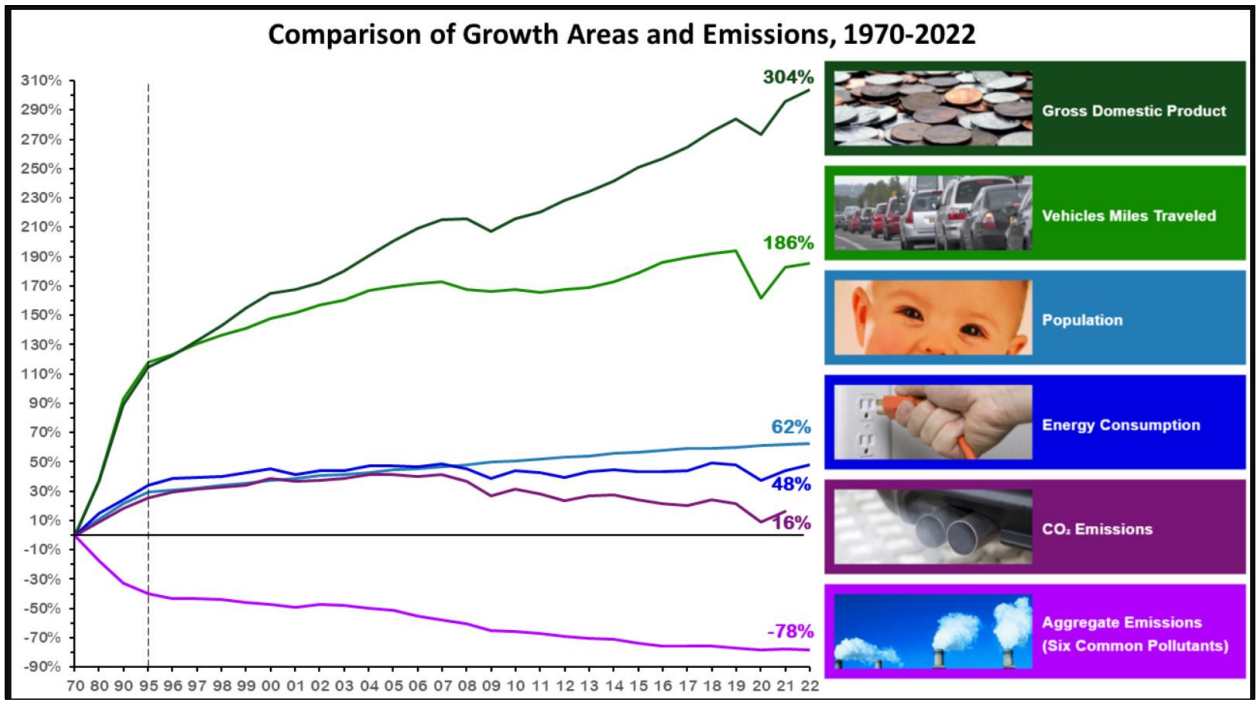
"Missing from National Association of Manufacturers' quote is the fact that clean air progress occurred thanks to increasingly strong National Ambient Air Quality Standards – and that they vehemently opposed those updated standards that led to the progress they are now celebrating."

A 2023 letter from several trade associations notes, "Our members have innovated and worked with regulators to lower $PM_{2.5}$ concentrations significantly, and further progress is being made as part of the energy transition investments. The EPA recently reported that $PM_{2.5}$ 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.[23]

Too often, opponents of stronger standards attempt to downplay this logical inconsistency by calling for a need to "modernize" the Clean Air Act. The tools they propose to "modernize" the law – like taking into account factors other than human health when setting the standards, or weakening the permitting process – would actually undermine or remove the very parts of the law that have driven clean air progress to this point. For them, "modernize" means "weaken."

The nation does not have to choose between healthy air and a healthy economy. In 2011, EPA provided to Congress a projection of the costs and benefits of the Clean Air Act over the years

from 1990 to 2020. EPA calculated that the benefits would exceed the costs by a minimum of $3 for every $1 spent. The benefits may have been as much as $30 to $90 for every $1 spent.[24] 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).[25]




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.[26]

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

Being designated in nonattainment of the new, more health-protective standard is not the problem; having pollution levels that harm public health is the problem.

The bottom line is that EPA's new annual limit on particle pollution will save lives. It's part of EPA's obligations under the Clean Air Act 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 agreed that these standards were necessary to protect health. Now, local, state and Tribal governments and EPA must fully implement and enforce these lifesaving standards.

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