



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

June 8, 2020

THE ADMINISTRATOR

The Honorable Frank Pallone, Jr.  
Chairman  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Greg Walden  
Ranking Member  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Paul D. Tonko  
Chairman  
Subcommittee on Environment  
and Climate Change  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable John Shimkus  
Ranking Member  
Subcommittee on Environment  
and Climate Change  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Pallone, Chairman Tonko, Ranking Members Walden and Shimkus,

I am writing in response to the widespread attention and false claims in the media and within Congress attempting to link recent actions taken by the U.S. Environmental Protection Agency to an increase in air pollutants—specifically particulate matter (PM)—and COVID-19 mortality.

In April 2020, Harvard researchers released a study showing an association between long-term exposure to PM<sub>2.5</sub> and increased short-term COVID-19 mortality rates. This study, which has not been peer reviewed, claimed that an increase of only 1 ug/m<sup>3</sup> in PM<sub>2.5</sub> over 17 years is associated with a 15 percent increase in the COVID-19 death rate. Almost immediately after releasing the draft study, the researchers corrected the study, dropping this finding to an 8 percent increase in death rate. The study authors' nearly 50 percent downgrade of the potential impacts is reflective of a broader need for a full peer review and raises questions about other possible flaws which may be uncovered with such a review. Drawing conclusions from a study without peer review and with insufficient data is irresponsible and can paint a distorted scientific picture.

Consistent with longstanding Agency policy and OMB guidance, all scientific and technical information supporting EPA decisions must be peer reviewed. As such, the EPA will not consider this study's findings unless and until a robust peer review process is complete. Furthermore, we hope the authors of this study make their underlying data available so that other researchers can double check and reproduce the analysis, a pragmatic step towards transparency in science. EPA scientists have already identified a number of uncertainties that we hope will be cleared up in the peer review such as an ill-fitting statistical model and poor discussion of

confounding variables impacting the situation. The study does not discuss patients moving geographical locations, the changes in ambient conditions over the past three years, the possibility that ambient concentrations may not be the same as personal exposure, or whether the models are accurate for making county-level measurements.

Moreover, the study unfortunately includes an uninformed if not intentional misrepresentation of EPA's COVID-19 temporary enforcement policy. There is no suspension of EPA enforcement. EPA continues to enforce environmental laws and protect human health and the environment nationwide during these unprecedented times. The temporary policy does not offer enforcement discretion for increased emissions. No increase in emissions is allowed under the policy. The broad claim that the temporary polices relaxes environmental rules is false and is in no way relevant to the study's conclusion that 17 years of exposure to PM<sub>2.5</sub> is potentially associated with COVID-19 deaths and presents another reason for a robust peer review of the study. Given the study's shortcomings, it is unfortunate that it has received favorable and wide-spread media coverage during the height of the COVID-19 pandemic without these caveats.

Among many methodological and analytical shortcomings, the study's use of ambient PM<sub>2.5</sub> concentration data from 2000 to 2016, and its conclusion that "a small increase in long-term chronic exposures to PM<sub>2.5</sub> leads to a large increase in COVID-19 death rate . . ." fails to consider the real world scenario. From 2000 to 2018, EPA's enforcement of existing air pollution standards resulted in reductions of PM<sub>2.5</sub> concentrations in the United States by 39 percent on average. With such a large decrease in exposure to concentrations of PM<sub>2.5</sub>, especially over the last decade, the Harvard study ignores the reality of EPA's longstanding clean air regulatory regime and correlative reduction in air pollution in the United States.

Looking back over just the last three years, under the Trump Administration, the number of days listed as unhealthy for sensitive groups has dropped by 34 percent. Further, during the Trump Administration we have seen the following drops in emissions of criteria and precursor pollutants:

- Nitrogen Oxides (NO<sub>x</sub>) decreased by 10%
- Particulate Matter 2.5 (PM<sub>2.5</sub>) decreased by 1%
- Sulfur Dioxide (SO<sub>2</sub>) decreased by 16%
- Carbon Monoxide (CO) decreased by 6%
- Volatile Organic Compounds (VOC) decreased by 3%

Under this Administration, the United States continues to have world-leading emissions reductions—which is producing clean air for our citizens alongside economic growth. EPA's latest air progress report found that since the passage of the Clean Air Act in 1970 through the end of 2019, emissions have declined by 77 percent and the U.S. economy grew by 285 percent. Since 2000, concentrations of PM<sub>2.5</sub> have dropped by roughly 40 percent. A great deal of this progress has taken place in low-income counties across the country. It is important to note, U.S. fine particulate matter levels are five times below the global average, seven times below China's levels, and well below France, Germany, Mexico, and Russia.

Despite accusations from some in Congress to the contrary, over the past three years (2017-2019), the combined emission of criteria pollutants and their precursors dropped 7 percent. Under President Trump's leadership, EPA will continue its mission of protecting public health and the environment by ensuring the continued downward trend of pollutants in our nation's air. Given these facts, the Harvard study ignores the reality that air quality in the United States has continued to improve under the EPA's implementation of the Clean Air Act.

Recognizing that science advances and that on a regular basis new knowledge should be incorporated into the analysis, Congress requires that EPA revisit National Ambient Air Quality Standards (NAAQS) for each pollutant every five years. With respect to air pollution and COVID-19, the Agency anticipates that a significant body of peer reviewed studies—perhaps even this Harvard study—will be available for our scientists to consider the next time EPA reevaluates the NAAQS for PM<sub>2.5</sub>.

As demonstrated above, the actions this Administration has taken and will continue to take are expected to result in meaningful reductions of air pollution in the United States. As we approach EPA's 50th anniversary in December, we can proudly say that Americans now have significantly cleaner air, land, and water than in the past. The Trump Administration is proving that environmental protection and economic health can go hand-in-hand.

If you have further questions, you may contact me, or your staff may contact Joseph Brazauskas in the Office of Congressional and Intergovernmental Relations at [Brazauskas.Joseph@epa.gov](mailto:Brazauskas.Joseph@epa.gov) or (202) 564-5189.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew R. Wheeler", with a long horizontal flourish extending to the right.

Andrew R. Wheeler