United States Senate
WASHINGTON, DC 20510

April 14, 2020

The Honorable Andrew Wheeler
Administrator
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC, 20460

Dear Administrator Wheeler:

We write to express concern that in the midst of the COVID-19 epidemic, the Environmental Protection Agency (EPA) is taking actions that will worsen air pollution and – according to recent research – could result in higher death rates among COVID-19 patients. A new study from the Harvard School of Public Health suggests a link between more air pollution and higher mortality among COVID-19 patients.[1] Yet despite this ongoing public health emergency, the EPA has taken steps in recent weeks that will increase air pollution, including rolling back auto emissions standards. Today, EPA announced its decision to maintain current national ambient air quality standards that EPA's own scientists say fail to protect public health – and that research links with higher COVID-19 mortality. The Environmental Protection Agency should be taking actions that will further protect health during this crisis, not put more Americans at risk.

Air pollution in the form of fine particulate matter can be particularly detrimental to human health.[2] This air pollutant, also known as $PM_{2.5}$, consists of particles or droplets in the air that are two and one half microns (one-millionth of a meter) or less in width. Because of their small size, these air pollutant particles can travel deep into the respiratory tract, reaching the lungs. Long-term exposure to fine particulate matter can dramatically worsen lung and heart health, causing or aggravating chronic conditions.[3] Research from the Centers for Disease Control and Prevention (CDC) indicates that those with chronic lung and heart conditions are at higher risk of severe illness or death from COVID-19 if they are infected.[4]

The Harvard study found that an increase of only one microgram (one-millionth of a gram) per cubic meter of air in fine particulate matter is associated with a 15 percent increase in the COVID-19 death rate.[5] For example, if Manhattan's air for the past 20 years contained one less

[1] Xiao Wu et al., *Exposure to air pollution and COVID-19 mortality in the United States*. Harvard T.H. Chan School of Public Health. Available at https://projects.iq.harvard.edu/files/covid-pm/files/pm_and_covid_mortality.pdf
[2] *Particulate Matter (PM) Pollution.* Environmental Protection Agency. Available at https://www.epa.gov/pm-pollution/particulate-matter-pm-basics.
[3] *How Does PM Affect Human Health?* Environmental Protection Agency. Available at https://www3.epa.gov/region1/airquality/pm-human-health.html.
[4] *Groups at Higher Risk for Severe Illness*, Centers for Disease Control and Prevention. Available at https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html
[5] Xiao Wu et al. *Exposure to air pollution and COVID-19 mortality in the United States*. NOTE: The study accounts for a wide variety of potential confounding factors, such as population size, hospital beds, number of individuals tested, weather, and socioeconomic and behavioral variables such as obesity and smoking.

microgram of fine particular matter per cubic meter of air, the study predicts there would have been 248 fewer COVID-19 deaths in the borough through April 4.[6]

As the authors of the Harvard study note, their results "underscore the importance of continuing to enforce existing air pollution regulation during the COVID-19 crisis."[7] Failure to do so could "potentially increase the COVID-19 death toll and hospitalizations, further burdening our healthcare system and drawing resources away from COVID-19 patients."[8] Yet in the past two weeks, in the midst of what the Department of Health and Human Services acknowledges is a public health crisis, EPA took steps to loosen auto emissions standards and increase air toxic emissions from some of our nation's coal-fired power plants steps – steps that will increase air pollution and increase deaths from respiratory illnesses such as COVID-19.

Additionally, earlier today EPA announced its draft decision to leave the National Ambient Air Quality Standards for fine particulate matter unchanged.[9] Even prior to the COVID-19 pandemic, research showed that this standard for this air pollution does not protect public health. EPA's own scientists found that the current level is inadequate in January.[10] Now the Harvard public health study on fine particulate matter suggests that reducing this air pollutant could save lives by reducing COVID-19 mortality – yet EPA's draft decision indicates that it will take no action to lower this standard.

Given the new information regarding this dangerous link between air pollution and worse COVID-19 patient outcomes and the imperative it suggests to enforce existing air pollution safeguards, we request that you respond to the following no later than April 21, 2020:

1. Does the EPA plan to enforce all other existing air pollution regulations during the COVID-19 crisis?
1. Please provide a list of air pollution regulations that EPA expects to propose or finalize during 2020.
2. What immediate actions are being taken by the EPA to improve air quality in specific locales and/or nationwide to improve COVID-19 patient outcomes?
3. What, if any, research has the EPA undertaken on the link between poor air quality and worse outcomes for COVID-19 patients? Is any further research by the EPA on this link being considered?
4. Are you aware of any research or action being undertaken by other federal or state agencies on this link? If so, have you been in contact with these agencies regarding this? How will EPA incorporate the results of this research into pending rulemakings, including any reviews of the National Ambient Air Quality Standards?

[6] Id.
[7] Id.
[8] Id.
[9] *EPA Proposes to Retain NAAQS for Particulate Matter*. United States Environmental Protection Agency. April 14, 2020. Available at https://www.epa.gov/newsreleases/epa-proposes-retain-naaqs-particulate-matter
[10] *Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter*. United States Environmental Protection Agency. January 2020. Available at https://www.epa.gov/sites/production/files/2020-01/documents/final_policy_assessment_for_the_review_of_the_pm_naaqs_01-2020.pdf

5. Are you aware of any research or action being undertaken by other countries on this link? If so, have you been in contact with these countries' health or environmental agencies regarding this?
6. How will this link between air quality and COVID-19 patient outcomes impact future EPA decision-making?

Thank you for your attention to this important matter. We urge you to take immediate action to improve nationwide air quality to ensure better COVID-19 patient outcomes.

Sincerely,

Margaret Wood Hassan
United States Senator

Thomas R. Carper
United States Senator

Michael F. Bennet
United States Senator

Richard Blumenthal
United States Senator

Cory A. Booker
United States Senator

Robert P. Casey, Jr.
United States Senator

Christopher A. Coons
United States Senator

Dianne Feinstein
United States Senator

Kirsten Gillibrand
United States Senator

Kamala D. Harris
United States Senator

Angus S. King, Jr.
United States Senator

Edward J. Markey
United States Senator

Jeffrey A. Merkley
United States Senator

Jack Reed
United States Senator

Bernard Sanders
United States Senator

Chris Van Hollen
United States Senator

Elizabeth Warren
United States Senator

Sheldon Whitehouse
United States Senator