

# PSR<sup>®</sup> Physicians for Social Responsibility



United States Affiliate of International Physicians for the Prevention of Nuclear War

October 31, 2018

The Honorable Andrew Wheeler  
Acting Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Submitted via [www.regulations.gov](http://www.regulations.gov)

Re: Docket EPA–HQ–OAR–2017–0355

Dear Acting Administrator Wheeler:

Physicians for Social Responsibility (PSR) is a 501(c)(3) scientific and educational organization headquartered in Washington DC with 30,000 health professionals, medical students and concerned citizen advocates in chapters across the country. Our mission is to protect human life from the gravest threats to health and survival; we number air pollution and climate change among those threats.

PSR submits these comments in strong opposition to the U.S. Environmental Protection Agency's (EPA) proposed rules to revise the "Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units: Emission Guideline Implementing Regulations; New Source Review (NSR) Program." The EPA's proposed replacement of the Clean Power Plan (CPP) is not just inadequate; it poses significant threats to our health and does nothing to protect us from climate change caused by carbon pollution from power plants. Furthermore, PSR opposes the proposed revisions to the NSR program which could further increase air and toxics pollution.

### **Climate change threatens human health**

The World Health Organization has called climate change "the greatest threat to global health in the 21<sup>st</sup> century."<sup>i</sup> We already face increased deaths, disease and other negative health

effects associated with climate change due to intense storms, heat waves, worsened air quality, flooding, sea surges, spread of insect-borne diseases, extended allergy seasons, and more. These impacts are already occurring, and the latest scientific consensus indicates that unless urgent actions are taken, they could reach potentially catastrophic levels. Specifically, the recently released special report (SR1.5) from the United Nations Intergovernmental Panel on Climate Change (IPCC), detailing the impact of global warming of 1.5°C above pre-industrial levels, finds that 2°C is no longer a safe goal to avoid the worst impacts of climate change.<sup>ii</sup> It warns that sweeping, society-wide actions must be taken at unprecedented levels over the next 12 years to slash carbon emissions to avoid calamitous environmental devastation. Currently, it is estimated that the world's temperature will rise by 3°C should no new mitigation measures be taken.

The IPCC SR1.5 is the most comprehensive collection of all known scientific, peer-reviewed, research on the impacts of 1.5°C of global warming on natural and human systems around the world. Written by 91 researchers across 44 countries, it explains that global emissions will have to be slashed by 45 percent to meet the 1.5°C target. Even the difference between a 1.5°C and 2°C temperature increase, while it may not seem substantial, can have a significant effect on the projected impacts.<sup>iii</sup> Examples from the report of the human health impacts to expect in a warming world include:

- An increase in heat-related mortality. There is robust evidence that climate change is affecting the frequency, intensity, and duration of heat waves and that exposure to high temperatures is associated with excess morbidity and mortality. Populations at highest risk include older adults, children, women, and those with chronic diseases.
- An increase in storm surges, coastal flooding, and sea level rise is projected to exacerbate the risk of death, injury, and ill-health.
- A shift and increase in the geographic range, seasonality, and intensity of transmission of climate-sensitive infectious diseases or their vectors, including Dengue Fever, Chikungunya, Yellow fever, and Zika virus, which could put more individuals at risk of the diseases they carry. The geographic range and seasonality of Lyme disease and other tick-borne diseases are also expected to expand in parts of North America and Europe.
- An increase in ozone-related mortality could result with additional warming because ozone formation is temperature-dependent.

Generally, a warming of 2°C is found to pose greater risks to human health than a warming of 1.5°C. Holding global warming at only 1.5°C compared to 2°C would: (1) lower the risk of temperature related morbidity; (2) decrease geographic ranges of mosquito-borne diseases; (3) lower the exposure of billions of people to heatwaves; and (4) prevent 110 to 190 million premature deaths.<sup>iv</sup>

### **The Clean Power Plan moves us in the right direction**

The CPP sets achievable targets for each state to reduce carbon emissions from its electricity sector, and gives the states time and flexibility to meet those goals. Taken together, the latest analyses from the Energy Information Administration show that under the Plan, the states would reduce power plant carbon emissions by as much as 36 percent below 2005 levels by 2030.<sup>v</sup> While these reductions are a significant and important contribution to our national efforts to reduce greenhouse gas emissions, they are still small in comparison with what is needed to limit global temperatures from exceeding what now seems to be the absolutely necessary threshold of 1.5°C.

**Any replacement of the Clean Power Plan should reduce carbon pollution even more than the original standards in order to protect human health and, ultimately, human survival from the dangers imposed by climate change.** Instead, the EPA's proposal sets no carbon pollution limits on existing coal-fired power plants. Rather, the emissions as set by the states would be based on "heat rate improvements" – minimal efficiency upgrades – at coal-fired power plants. With no specified emissions target or limits, this approach would fail to achieve any meaningful reductions in power plant pollution. Indeed, this proposal as written could cause an increase in total pollution if coal-fired power plants that improve their efficiency were to run more frequently. Ultimately, the EPA would be allowing old, failing, dirty coal plants that should be shut down to continue to operate and emit more dangerous carbon pollution into our air. Given the IPCC's analysis and their call for urgent and unprecedented action, this would be irresponsible and dangerous in the extreme.

Furthermore, the EPA proposal to replace the Clean Power Plan includes the rollback of longstanding requirements under the New Source Review program for power plants to install pollution controls if they build or expand in a way that would increase pollution. These detrimental revisions would permanently weaken the New Source Review process. As long as a power plant could show that its rate of pollution wouldn't worsen, it could expand without having to control its emissions, even if its total volume of emissions would go up. The result is that power plants could operate more often and for more years into the future without having to install and run pollution controls. This would lead to increases of such harmful pollutants as nitrogen oxides, sulfur dioxide, particulate matter, and air toxics, including mercury, not only in the communities where the plants are located but hundreds of miles downwind. Allowing power plants to increase their emissions of these pollutants profoundly fails to protect public health and is unacceptable.

## **Costs of inaction**

The EPA's CPP replacement proposal overstates the costs of industry compliance with the 2015 rule and understates the health benefits that will be lost. The costs to our health and our economy will derive from the impacts of climate change and from air pollution. Denying the science on the health impacts of climate change will not slow the increase in frequency and intensity of extreme weather events, the inevitable rise in sea levels, or the increase in air pollution that are already harming communities across the United States (US). Extreme weather events alone are very costly in terms of dollars and lives, and the number of such events with damages exceeding \$1 billion has significantly increased in the US in recent years. So far in 2018, there have been 11 weather and climate disaster events with losses exceeding \$1 billion each across the country.<sup>vi</sup> These include one drought event, six severe storm events, one tropical cyclone event, one wildfire event, and two winter storm events. Overall, these 2018 extreme weather events resulted in the deaths of 105 people and had significant economic effects on the areas impacted. And these numbers do not account for Hurricane Michael that hit the Florida Panhandle on October 10, 2018 and was one of the most intense hurricanes ever to make landfall the US.

Reducing coal combustion from power plants does more than slow climate change; it simultaneously reduces emissions of sulfur dioxide, particulate matter, nitrogen oxides, mercury, and dozens of other substances known to be hazardous to human health.<sup>vii</sup> These substances are associated with asthma attacks, heart attacks and stroke, as well as cancer and developmental and neurological problems. Failing to reduce this burden affects millions of Americans, most especially children, older adults, people with chronic lung diseases like asthma, people with cardiovascular diseases, and healthy adults who work or exercise outdoors. Low-income individuals and some racial and ethnic groups often suffer disproportionately from these impacts.

According to the EPA's own analysis,<sup>viii</sup> replacing the Clean Power Plan with the EPA-proposed rule could cause per year in 2030 up to 1,630 premature deaths, 120,000 more asthma attacks, 390,000 more restricted activity days for children, and 100,000 more missed days of school and work. EPA is sacrificing the lifesaving benefits that result under the CPP. Plus, these increased emissions are costly; EPA estimates that the proposal could impose up to \$10.8 billion in net costs per year in 2030.

Worldwide, according to the World Health Organization, about three million deaths a year are linked<sup>ix</sup> to ambient air pollution. By 2030, the global health cost of climate-related diseases that disproportionately affect children (diarrhea, malnutrition, malaria and heat stress) will be as high as \$4 billion a year.<sup>x</sup> These statistics show the need for increased global action to reduce

fossil fuel emissions. The US government must play its part and should be incentivizing the states to reduce fossil fuel use while increasing energy from healthy zero-carbon sources like wind and solar. Dismantling the CPP and removing NSR requirements does the exact opposite. It won't help our economy, it will hurt public health, and it tarnishes our nation's world reputation as a leader on climate change and protection of public health.

### **The Clean Power Plan will save lives**

The Clean Power Plan was developed based on solid scientific research documenting the serious health consequences of climate change and exposure to air pollution. The proposal was finalized with the input of over 4 million public comments, including comments from PSR members, chapters and staff. Repealing the CPP will result in preventable deaths and acute illnesses across the US.

There is abundant evidence in the scientific and medical literature for the public health impact of climate change.<sup>xi</sup> The science is solidly in support of reducing carbon emissions. Federal policies and rules that promote clean energy, restrict climate-altering emissions from power plants are essential to slowing the health damaging impacts of climate change. Dismantling the Clean Power Plan and replacing it with a policy that places no limits on carbon pollution from power plants violates EPA's responsibility under the Clean Air Act to protect public health and the environment.

To protect public health – as required under the Clean Air Act – EPA must reject this proposed replacement, and instead fully implement and enforce the Clean Power Plan. Lives depend on it. EPA must also reject the proposal to substantially weaken the New Source Review requirements that currently prevent areas from being burdened by even more toxic air pollution.

For these reasons, Physicians for Social Responsibility strongly opposes the EPA proposals to dismantle the Clean Power Plan and to remove current New Source Review requirements.

Sincerely,  
Antonia Herzog, Ph.D.  
Environment and Health Program  
Physicians for Social Responsibility

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<sup>i</sup> World Health Organization (WHO). <http://www.who.int/globalchange/global-campaign/cop21/en/>

<sup>ii</sup> Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C (IPCC SR1.5). <http://www.ipcc.ch/report/sr15/>

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<sup>iii</sup> IPCC SR1.5.

<sup>iv</sup> Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C (IPCC SR1.5). Synthesis on Health & Climate Science in the IPCC SR1.5 October 2018, p.12. <http://climatetracker.org/wp-content/uploads/2018/10/The-1.5-Health-Report.pdf>

<sup>v</sup> U.S. Energy Information Administration. Analysis of the Impacts of the Clean Power Plan. May 2015. <https://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf>

<sup>vi</sup> NOAA, National Centers for Environmental Information (NCEI): “Billion-Dollar Weather and Climate Disasters,” October 9, 2018. <https://www.ncdc.noaa.gov/billions/>

<sup>vii</sup> Driscoll C, Buonocore J, Levy J, Lambert K, et al. 2015 US power plant carbon standards and clean air and health co-benefits. *Nature Climate Change* 5: 525-540. Schwartz J, Buonocore J, Levy J, Driscoll C, Fallon Lambert K, and Reid S. Health Co-Benefits of Carbon Standard for existing Power Plants: Part 2 of the Co-Benefits of Carbon Standards Study. September 30, 2014. Harvard School of Public Health, Syracuse University, Boston University.

<sup>viii</sup> US EPA. Regulatory Impact Analysis (RIA) for the Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program. August 2018. EPA-452/R-18-006.

[https://www.epa.gov/sites/production/files/2018-08/documents/utilities\\_ria\\_proposed\\_ace\\_2018-08.pdf](https://www.epa.gov/sites/production/files/2018-08/documents/utilities_ria_proposed_ace_2018-08.pdf)

<sup>ix</sup> WHO. September 2016. <http://www.who.int/mediacentre/news/releases/2016/air-pollution-estimates/en/>

<sup>x</sup> WHO. July 2017. <http://www.who.int/mediacentre/factsheets/fs266/en/>

<sup>xi</sup> Numerous studies on the health effects of climate change have been published in recent years. Here is just a sampling: Watts N, Amann M, Ayeb-Karlsson S, Belesova K et al. 2018 *The Lancet Countdown on health and climate change: from 25 years of inaction to a global transformation for public health*. Short EE, Caminade C, and Thomas BN. *Climate Change Contribution to the Emergence or Re-Emergence of Parasitic Diseases*. 2017. *Infectious Diseases: Research and Treatment*. 10:1-7. Luber, G., K. Knowlton, J. Balbus, H. Frumkin, M. Hayden, J. Hess, M. McGeehin, N. Sheats, L. Backer, C. B. Beard, K. L. Ebi, E. Maibach, R. S. Ostfeld, C. Wiedinmyer, E. Zielinski-Gutiérrez, and L. Ziska, 2014: Ch. 9: Human Health. *Climate Change Impacts in the United States: The Third National Climate Assessment*, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 220-256. doi:10.7930/J0PN93H5. U.S. EPA, *Assessment of the Impacts of Global Change on Regional U.S. Air Quality: A synthesis of climate change impact on ground –level ozone*. April 2009. EPA/600/R-07/094F.