

March 17, 2015

**VIA REGULATIONS.GOV**

Gina McCarthy, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

**RE: National Ambient Air Quality Standards for Ozone; Proposed Rule  
EPA-HQ-OAR-2008-0699**

Dear Administrator McCarthy:

The undersigned groups, representing millions of Americans, urge the Environmental Protection Agency (EPA) to fulfill its mandate to protect public health by revising the primary National Ambient Air Quality Standard (NAAQS) for ozone to the level clearly dictated by the science: 60 parts per billion (ppb). Setting a standard in the range proposed by EPA—especially setting a standard of 70 ppb—will leave the air unsafe to breathe for millions of Americans including the most vulnerable members of society: children, people with asthma and other lung diseases, and older Americans. By contrast, EPA itself projects that setting the standard at 60 ppb will prevent 1.8 million asthma attacks, 1.9 million missed school days and 7,900 premature deaths. EPA should set a standard that will make the air safe for everyone to breathe by revising the ozone NAAQS to 60 ppb.

The Clean Air Act requires EPA to establish primary NAAQS at a level “requisite to protect the public health” with “an adequate margin of safety.”<sup>1</sup> The level must protect not only healthy individuals, but also sensitive populations such as children, older Americans, people with asthma and other lung diseases, and vulnerable populations including outdoor workers. Any uncertainties must be resolved in favor of additional health protection, as the Administrator in setting the primary NAAQS “is seeking not only to prevent pollution levels that have been demonstrated to be harmful but also to prevent lower pollutant levels that may pose an unacceptable risk of harm, even if the risk is not precisely identified as to nature or degree.”<sup>2</sup> Recognizing that our scientific understanding of the health impacts of air pollution continues to grow and strengthen over time, the Clean Air Act requires EPA to review and revise the primary NAAQS every five years.<sup>3</sup> Yet despite EPA’s acknowledgment that the present 75 ppb standard is inadequate to protect public health, the NAAQS have not been revised since 2008, and EPA’s 2008 revision declined to follow the scientific recommendations of the Clean Air Scientific Advisory Committee (CASAC), which unanimously advised further strengthening the standard.

In revising the NAAQS, EPA must base its standard on the best available science. Since the 2008 revision, the scientific evidence has become even more compelling that a standard of

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<sup>1</sup> 42 U.S.C. § 7409(b)(1).

<sup>2</sup> National Ambient Air Quality Standards for Ozone; Proposed Rule, 79 Fed. Reg. 75,234, 75,238 (Dec. 17, 2014) [hereinafter “Proposed Rule”].

<sup>3</sup> 42 U.S.C. § 7409(d)(1).

60 ppb is required to protect public health with an adequate margin of safety. EPA's Integrated Science Assessment for its review of the standard includes 1,000 new studies published since the previous review documenting the wide range of adverse health effects at levels down to at least 60 ppb. As CASAC confirmed in its most recent review, "there is a causal relationship between short-term ozone exposure and a broad range of respiratory effects, including lung function decrements, respiratory symptoms, inflammation, hospital admissions, and emergency department visits – all of which are observed below the level of the current ozone NAAQS."<sup>4</sup> Controlled human chamber studies have found statistically significant lung function decrements in healthy adults exposed to levels of 60 ppb for only 6.6 hours.<sup>5</sup> And epidemiological studies have demonstrated that increasing concentrations of ozone are associated with lung function decrements, increases in respiratory-related hospital admissions and emergency department visits; and increases in respiratory mortality at levels between 60 and 65 ppb.<sup>6</sup> Taken together, these and the thousands of other studies reviewed by EPA clearly demonstrate the need for a standard no higher than 60 ppb.

In setting the standard, EPA must protect the health of children, people with asthma and other lung diseases, older Americans and other sensitive and vulnerable populations. In particular, children are uniquely vulnerable to the adverse effects of ozone pollution. Due to ongoing lung growth and development, higher relative ventilation rates, and high levels of outdoor activity, children face extra health risks from ozone exposure. Moreover, children are more likely to be active outdoors through sports, school, and play,<sup>7</sup> and children's outdoor activities increase their exposure to ozone pollution and, correspondingly, increase their risk of ozone-related health impacts.<sup>8</sup> EPA's Policy Assessment estimates that less than 1% of children would experience exposures of concern under a 60 ppb standard, and virtually no children would experience multiple such exposures.<sup>9</sup> By contrast, an unacceptable 3 to 10% of children would be subject to one or more exposures of concern under a proposed standard of 70 ppb.<sup>10</sup>

In addition to protecting children's health, EPA must be mindful in setting the new standard that the health burdens of ozone are not evenly distributed, and that poorer communities and communities of color bear a disproportionate share of the health burden of air pollution. As EPA has recognized, "[n]early 26 million Americans, including seven million children, are affected by asthma . . . . But when emergency room doors burst open for someone with an

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<sup>4</sup> Ltr. from Dr. H. Christopher Frey, Chair, CASAC, to Gina McCarthy, Administrator, EPA, EPA-CASAC-14-005, CASAC Review of the EPA's *Health Risk and Exposure Assessment for Ozone (Second External Review Draft – February, 2014)*, at 3 (July 1, 2014).

<sup>5</sup> See, e.g., Kim et al (2011). Lung function and inflammatory responses in healthy young adults exposed to 0.06 ppm ozone for 6.6 hours. *Am J Respir Crit Care Med* 183: 1215-1221.

<sup>6</sup> See EPA, Integrated Science Assessment (2013) at 2-22 to 2-23.

<sup>7</sup> Proposed Rule, 79 Fed. Reg. 75,267 ("It is generally recognized that children spend more time outdoors than adults, and, therefore, would be expected to have higher exposure to O<sub>3</sub> than adults."); see also EPA, Final Health Risk & Exposure Assessment, at 2-18 (Aug. 2014) ("Children generally spend more time in outdoor locations and also generally have higher activity levels in those environments.").

<sup>8</sup> See Final Health Risk & Exposure Assessment at 5-11 ("Due to the increased amount of time spent outdoors engaged in relatively high levels of physical activity (which increases intake), school-age children as a group are particularly at risk for experiencing O<sub>3</sub>-related health effects.").

<sup>9</sup> EPA, Final Policy Assessment at 4-28 (Aug. 2014).

<sup>10</sup> *Id.* at 4-27 (based on data from EPA's urban case study).

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asthma attack, chances are the patient will be a poor, minority child.”<sup>11</sup> African-Americans are the group most heavily burdened by asthma in the United States, and Black non-Hispanic children are more than 60% more likely to experience asthma than White non-Hispanic children.<sup>12</sup> Racial disparities extend to emergency department visits and asthma-related hospitalizations.<sup>13</sup> The CDC reports that more than 1 in 4 Black adults cannot afford their asthma medication and Black Americans are 2 to 3 times more likely to die from asthma than any other racial or ethnic group.<sup>14</sup>

Ultimately, the support for a 60 ppb standard is overwhelming. Noting that “[c]hildren suffer a disproportionate burden of ozone-related health impacts due to critical developmental periods of lung growth in childhood and adolescence that can result in permanent disability,” EPA’s Children’s Health Protection Advisory Committee “strongly re-affirm[ed] its “recommendation of 60 ppb based on the expanding scientific evidence base documenting adverse childhood health impacts in relation to ambient ozone exposure” and explained that “[t]he higher end of the range 60 ppb – 70 ppb, put forth by [CASAC] . . . will not be sufficient to protect children’s health.”<sup>15</sup> CASAC itself recognized the appropriateness of a 60 ppb standard, informing EPA that “the recommended lower bound of 60 ppb would certainly offer more public health protection than levels of 70 ppb or 65 ppb and would provide an adequate margin of safety,”<sup>16</sup> as required by the Clean Air Act. And the 60 ppb recommendation was widely supported by the medical and public health community. The American Thoracic Society recently reiterated its call for a 60 ppb standard—previously made in 2007 and in 2010—noting that “[w]hile the recommended standard endorsed by ATS has not changed during this time, the scientific evidence supporting this recommendation has significantly strengthened.”<sup>17</sup> EPA should heed the advice of these medical and health experts by setting the primary ozone NAAQS at 60 ppb.

Thank you for your consideration of our comments.

Sincerely,

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<sup>11</sup> <http://epa.gov/sciencematters/oct2012/asthmagap.htm>.

<sup>12</sup> Centers for Disease Control and Protection, Asthma Surveillance Data, <http://www.cdc.gov/asthma/nhis/2013/table2-1.htm> (Nationally, lifetime asthma prevalence for non-Hispanic Black children is 18.2% as compared to 11.3% for White non-Hispanic children).

<sup>13</sup> See CDC, *Asthma’s Impact on the Nation: Data from the CDC National Asthma Control Program*, at 3.

<sup>14</sup> *Id.* at 4.

<sup>15</sup> Letter from Sheela Sathyanarayana MD, MPH, Chair, Children’s Health Protection Advisory Committee (CHPAC) to Christopher Frey PhD, Chair, US EPA Clean Air Scientific Advisory Committee, May 19, 2014.

<sup>16</sup> Letter from Dr. H. Christopher Frey, Chair, CASAC, to Gina McCarthy, Administrator, EPA, EPA-CASAC-14-004, CASAC Review of the EPA’s *Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards*, at ii (June 26, 2014).

<sup>17</sup> Rice MB, Guidotti TL, Cromar KR, on behalf of the ATS Environmental Health Policy Committee. Scientific Evidence Supports Stronger Limits on Ozone. *Am J Crit Care Med*. First published online 23 Dec 2014 as DOI: 10.1164/rccm.201411-1976ED.

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Air Alliance Houston  
American Nurses Association- RI  
Athens County Fracking Action Network  
Bridging the Gap  
California Communities Against Toxics  
Center for Biological Diversity  
Center for Effective Government  
Citizens Against Ruining the Environment  
Citizens Environmental Coalition  
Citizens for Pennsylvania's Future (PennFuture)  
Clean Air Carolina  
Clean Air Council  
Clean Air Watch  
Climate Parents  
Communities for Clean Air  
Community In-power and Development Association Inc  
DC Environmental Network  
Diesel Health Project  
Downwinders at Risk  
Earthworks  
Empire State Consumer Project, Inc.  
Environmental Defense Fund  
Environmental Law and Policy Center  
Environmental Social Work Department in the College of Social  
Work at the University of Tennessee  
Ethical Society of St. Louis  
Farmworker Association of Florida  
Green America  
GreenLaw  
Greenpeace  
HEAL Utah  
Improving Kids' Environment  
Institute of Neurotoxicology & Neurological Disorders  
Interfaith Power & Light  
Interfaith Power & Light - DC, MD, NoVA  
Jesus People Against Pollution  
Jewish Environmental Initiative, a committee of the The Jewish  
Community Relations Council of St. Louis (JCRC)  
Ka Wai Ola O Waianae  
Labor Council for Latin American Advancement – Denver, CO  
Labor Council for Latin American Advancement- Connecticut  
Labor Council for Latin American Advancement –St. Paul, MN

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League of Conservation Voters  
League of Women Voters  
Lone Star Chapter of the Sierra Club  
Massachusetts Nurses Association  
Medical Advocates for Healthy Air  
Metro St. Louis Coalition for Inclusion and Equity  
Mid-Missouri Peaceworks  
Mid-South Peace & Justice Center  
Midwest Coalition for Responsible Investment  
Missouri Coalition for the Environment  
Missouri Interfaith Power & Light  
Mom's Clean Air Force  
Montana Environmental Education Center  
Montanans Against Toxic Burning  
NAACP  
NAACP – Kansas City, Kansas  
National Audubon Society  
National Nurses United  
Nature Abounds  
Organizing for Action-East Texas  
PenderWatch and Conservancy  
People for Community Recovery  
Physicians for Social Responsibility - Kansas City  
Physicians for Social Responsibility - Texas  
Populists in Action  
Powder River Basin Resource Council  
Public Citizen  
Redlands Sustainability Network  
Respiratory Health Association  
Safe Climate Campaign  
Save the Dunes  
Sciencecorps  
Sierra Club  
Southern Alliance for Clean Energy  
St. Louis Climate Reality  
SustainUS  
Texas Campaign for the Environment  
Texas Environmental Justice Advocacy Services (t.e.j.a.s.)  
The Rachel Carson Council  
The SIGNS Initiative (Safe and Inviting Green Neighborhoods)  
Utah Clean Air Alliance  
Utah Moms for Clean Air

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Utah Physicians for a Healthy Environment

WE ACT for Environmental Justice

Western Organization of Resource Councils

Working Effectively for Clean Air Now (We Can)