

Testimony
**EPA’s “Proposed Revisions to the National Ambient Air Quality Standards
for Particle Pollution”**
Docket Number EPA-HQ-OAR-2007-0492

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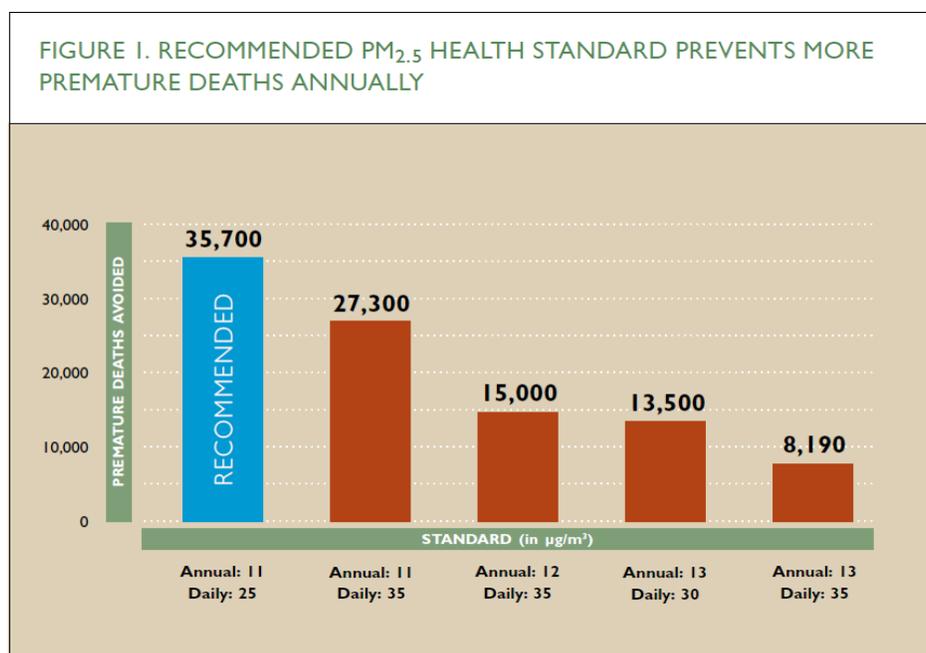
My name is Erica Morehouse and I am a staff attorney specializing in climate and clean air with Environmental Defense Fund (EDF), a non-partisan environmental organization with more than 750,000 members nationwide. EDF is dedicated to working towards innovative, cost-effective solutions to environmental problems, building on a foundation of rigorous science, economics, and law.

Health and Environmental Benefits of a Strong Particulate Matter Standard

Particulate pollution, or soot, is associated with serious adverse human health impacts, including premature death; cardiovascular disease such as heart attacks, strokes, heart disease; and respiratory disease. It is estimated that 9,200 premature deaths every year in California are associated with fine particulate pollution.ⁱ Consistent with the most recent health science, we urge EPA to strengthen the annual standard for fine particulate matter to 11 micrograms per cubic meter. And although EPA is proposing to maintain the 24-hour standard at 35 micrograms per cubic meter, we recommend the 24-hour standard be strengthened to 25 micrograms per cubic meter due to the public health threat posed by short-term exposure. Particulate matter is also the main cause of reduced visibility and haze, which harms the scenic vistas in our treasured National Parks, which about 280 million people visited in 2011.ⁱⁱ We must protect these iconic natural areas for future generations.

When compared to current air quality, strengthening the nation's current health standards for particulate pollution could prevent as many as 35,700 premature deaths, 2,350 heart attacks, and 23,000 visits to the hospital and emergency room each year.ⁱⁱⁱ EPA’s analysis found that strengthening the annual standard to 11 micrograms per cubic meter and the daily standard to 30 micrograms per cubic meter would yield \$14–36 billion in net annual benefits.^{iv} A study released this month as a follow up to the Harvard Six Cities Study reaffirmed the association of particulate pollution exposure to increased risk of premature mortality. The study found that every increase of 10 micrograms per cubic meter in fine particulate pollution was associated with

a 14% increased risk of “all-cause” mortality, a 26% increase in cardiovascular death, and a 37% increase in lung cancer death.^v



Source: American Lung Association, Clean Air Task Force, and Earthjustice, *Sick of Soot: How the EPA Can Save Lives by Cleaning Up Fine Particulate Air Pollution*, 2011.

Health Benefits for California

California stands to benefit more than any other state from protective health-based standards for particulate pollution. Clean air standards to protect human health from particulate pollution will help save thousands of lives in California. According to the American Lung Association, the nation’s top five ranked metropolitan areas most polluted by year-round and short-term particulate pollution are all in California.^{vi} And the communities most heavily burdened by air pollution are often the ones with the fewest resources to cope with the burden. Asthma in the San Joaquin Valley has reached crisis levels. One in five children in Fresno County and one in three children in King County have been diagnosed with asthma by a health provider.^{vii} And these central valley communities have child poverty rates above 30% - with Fresno reaching the highest in the state at 38%.^{viii} The Sacramento metro area is ranked 21st nationwide for short-term particulate pollution and is home to more than 40,000 children at risk from asthma and more than 600,000 people at risk from heart disease.^{ix}

But all of these areas struggling to provide cleaner air will benefit from protective health-based standards for particulate matter. And California hosts two of the top five metropolitan areas in the country (Los Angeles/Long Beach/Santa Ana and Riverside/San Bernadino/Ontario) that will benefit the most from the daily and annual health-based particulate standards recommended by

EDF and other organizations, with an estimated 5,590 lives saved every year in those areas alone.^x

Updated Health Protections are Long Overdue

The public has been waiting long enough for updated standards based on the latest science. This proposal comes almost three years after the D.C. Circuit Court remanded the 2006 standards back to EPA to correct the deficiencies identified by the Court. Every year of delay has resulted in thousands of avoidable deaths, numerous heart attacks, asthma attacks, and other health impacts. The Clean Air Scientific Advisory Committee, EPA's independent science advisors, unanimously concluded that the current standards do not protect human health. The American Thoracic Society, the American Academy of Pediatrics, the American Medical Association, the American Public Health Association and others have all called for more protective particulate matter standards. We look forward to EPA finalizing strong health-protective standards this December.

EDF will be submitting further technical comments on the proposal. Thank you for the opportunity to testify.

ⁱ CARB, *Estimate of Premature Deaths Associated with Fine Particle Pollution (PM_{2.5}) in California Using a U.S. Environmental Protection Agency Methodology*, August 31, 2010.

ⁱⁱ National Park Service, <http://www2.nature.nps.gov/stats/viewReport.cfm>.

ⁱⁱⁱ American Lung Association, Clean Air Task Force, and Earthjustice, *Sick of Soot: How the EPA Can Save Lives by Cleaning Up Fine Particulate Air Pollution*, 2011. Available at: <http://www.catf.us/resources/publications/view/159>.

^{iv} Environmental Protection Agency, *Regulatory Impact Analysis for the Proposed Revisions to the National Ambient Air Quality Standards for Particulate Matter*, June 2012.

^v Lepeule, J. et al. *Environmental Health Perspectives*, "Chronic Exposure to Fine Particles and Mortality: An Extended Follow-up of the Harvard Six Cities Study from 1974 to 2009," 120(7) July 2012.

^{vi} American Lung Association, *State of the Air 2012*, 2012. Available at:

<http://www.stateoftheair.org/2012/assets/state-of-the-air2012.pdf>.

^{vii} <http://www.californiabreathing.org/asthma-data/county-comparisons/lifetime-asthma-prevalence-children-2007>

^{viii} Public Policy Institute of California, *Child Poverty in California*, 2011.

http://www.ppic.org/main/publication_show.asp?i=721

^{ix} American Lung Association, *State of the Air 2012*, 2012. Available at:

<http://www.stateoftheair.org/2012/assets/state-of-the-air2012.pdf>.

^x American Lung Association, Clean Air Task Force, and Earthjustice, *Sick of Soot: How the EPA Can Save Lives by Cleaning Up Fine Particulate Air Pollution*, 2011. Available at: <http://www.catf.us/resources/publications/view/159>.