August 31, 2012

Lisa P. Jackson, Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

RE: Docket EPA-HQ-OAR-2007-0492

Dear Administrator Jackson:

We are public health and medical organizations who work to improve the health and treatment of millions. Our organizations are keenly aware of the public health and medical threats from particulate matter and we write to rge the U.S. Environmental Protection Agency to significantly strengthen both the annual and the 24-hour average National Ambient Air Quality Standards (NAAQS) for fine particulate matter ( $PM_{2.5}$ ) to protect public health. Specifically, we recommend that the annual standards be set at 11 µg/m<sup>3</sup> and the 24-hour standard be set at 25 µg/m<sup>3</sup>.

Ample scientific evidence supports adopting tighter standards to protect the health of people who are most susceptible to the serious health effects of these pollutants. More than 10,000 peer-reviewed scientific studies have been published since 1997 when EPA adopted the current annual standard. These studies validate earlier epidemiologic studies linking both acute and chronic fine particle pollution with serious morbidity and mortality. The newer research has also expanded our understanding of the range of health outcomes associated with PM, and has identified adverse respiratory and cardiovascular health effects at lower exposure levels than previously reported. As discussed and interpreted in the EPA's 2009 *Integrated Science Assessment for Particulate Matter*, the new evidence reinforces already strong existing studies and supports the conclusion that PM<sub>2.5</sub> is causally associated with numerous adverse health effects in humans, at exposure levels far below the current standard. Such a conclusion demands prompt action to protect human health.

At the conclusion of the thorough review of the current research, the Clean Air Scientific Advisory Committee and EPA's own staff scientists concluded that  $PM_{2.5}$  causes or is likely the cause of premature deaths, and significant health problems, such as increased hospital admissions and emergency

department visits for cardiovascular and respiratory problems, including heart attacks and strokes.  $PM_{2.5}$  also is linked to the development of chronic respiratory disease, reproductive and developmental harm, as well as cancer, mutagenicity and genotoxicity.

The evidence documents risk well below the current annual average standard of 15  $\mu$ g/m<sup>3</sup>. Multiple, multi-city studies long-term have shown clear evidence of premature death, cardiovascular and respiratory harm as well as reproductive and developmental harm at contemporary concentrations far below the level of the current standard.

Fine particulate air pollution cuts short the lives of tens of thousands of Americans each year. Studies have shown fine particulate air pollution is shortening lives by up to six months.

Infants, children and teenagers are especially sensitive, as are the elderly, and people with cardiovascular disease, lung disease, or diabetes. The new EPA standards should be set at levels that will protect these sensitive people with an adequate margin of safety, as required by the Clean Air Act.

We urge you to set the following primary NAAQS for particulate matter to protect public health:

• Annual average  $PM_{2.5}$  standard of 11 µg/m<sup>3</sup>

## • 24-hour average $PM_{2.5}$ standard of 25 $\mu$ g/m<sup>3</sup>

We support a stronger 24-hour standard as well as a stronger annual standard. Lowering the annual standard will reduce chronic exposures but it cannot protect against peak daily concentrations that have also been linked to serious harms to human health. Studies of short-term exposure demonstrate that  $PM_{2.5}$  air pollution increases the risk of hospital admissions for heart and lung problems even when you exclude days with pollution concentrations at or above the current daily standard of 35 µg/m<sup>3.</sup>

Daily concentrations must be capped at lower levels to protect against peak exposure days that occur due to local and seasonal sources of emissions. Strengthening both the annual and daily standards is necessary to provide healthier air to breathe for people all across the nation. Numerous scientific studies have now identified increased health risks in association with traffic-generated air pollution, including fine particulate matter. We commend EPA's proposal to begin a program of roadside monitoring of  $PM_{2.5}$  pollution, but the size of the roadside monitoring proposed is far too small. We urge EPA to expand the proposed roadside PM monitoring network to better protect the health of millions of Americans who live in high traffic areas.

To help us protect the health of our families, friends, neighbors and patients, we call on EPA to set much more protective fine particulate standards. Thank you for considering our views.

## Sincerely,

American Lung Association in Alaska American Lung Association in Alabama American Lung Association in Arkansas Arizona Public Health Association American Lung Association in Arizona Fresno-Madera Medical Society Southern California Public Health Association American Lung Association in California California Thoracic Society American Lung Association in Colorado Asthma and Allergy Foundation of America American Lung Association in DC Delaware Ecumenical Council on Children American Lung Association in Delaware American Lung Association in Florida American Lung Association in Georgia American Lung Association in Hawaii Iowa Public Health Association American Lung Association in Iowa American Lung Association in Idaho American Lung Association in Illinois American Lung Association in Wisconsin American Lung Association in Indiana American Lung Association in Kansas American Lung Association in Louisiana **HMHB** Coalition of MA **Codman Square Neighborhood Council** Cambridge Public Health Department Health Resources in Action

Massachusetts Association of Health Board Easton MA BOH FC Cooperative Public Health Service Board of Health / Whitman Bourne Massachusetts Board of Health **Clarksburg Board of Health** Common Pathways, CHNA 8 **Pioneer Valley Asthma Coalition** AAFA New England Chapter American Lung Association in Maryland American Nurses Association-Maine **River Valley Healthy Communities Coalition** Maine Public Health Association American Lung Association in Maine Washtenaw Asthma Coalition American Lung Association in Minnesota American Lung Association in Missouri American Lung Association in Mississippi American Lung Association in Montana American Lung Association North Carolina American Lung Association in North Dakota American Lung Association in Nebraska American Lung Assoc. in New Hampshire American Lung Association in New Jersey New Mexico Public Health Association American Lung Association in New Mexico Nevada Public Health Association American Lung Association in Nevada American Lung Association Nevada/Reno

American Lung Association in New York Public Health Association of NYC American Lung Association in Ohio American Lung Association in Michigan American Lung Association in Kentucky American Lung Association in Tennessee Ohio Society for Respiratory Care American Lung Association in Oklahoma Oklahoma City Public Health American Lung Association in Oregon Pennsylvania Public Health Association American Lung Association in Pennsylvania QUALITY HOME MEDICAL American Lung Association of South Carolina Allergic Disease and Asthma Center American Lung Association in South Dakota American Lung Association in Texas Air Alliance Houston American Lung Association in Utah Healthcare Council NCA Virginia Society for Respiratory Care American Lung Association in Virginia American Lung Association in Vermont American Lung Association in West Nirginia American Lung Association in West Virginia American Lung Association in West Virginia