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Written Statement

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, I appreciate the opportunity to be here this morning to address the H.R. 1633, The Farm Dust Regulation Prevention Act of 2011. As you know, EPA Administrator Jackson committed in an October 14, 2011 letter that EPA is prepared to propose to keep the PM10 national ambient air quality standard (NAAQS) as it is, with no change. This existing standard has been in effect since 1987. I am hopeful that this announcement ends the myth that the Agency has plans to tighten regulation of "farm dust."

Given the Administrator's announcement, this bill is no longer necessary to produce its stated result -- to prevent the tightening of the coarse particle standard. Additionally, it is crucial for this Committee to note that this bill does far more than prohibit EPA from revising the coarse particle standard, and could roll back basic Clean Air Act protections and adversely affect public health in urban, suburban and rural areas.

Regulating Particulate Matter to Protect Human Health and Welfare

While I understand that the common parlance floating around the Hill is the term "farm dust" or, the term the bill uses, "nuisance dust," my remarks today are focused on particulate matter or particle pollution. Particulate matter (PM) is a term widely referenced and understood by state and local officials, scientists, medical professionals, industry, public health groups and other stakeholders, including many in the agricultural and mining communities.

Particle pollution is a complex mixture of extremely small particles and liquid droplets in the air. When we breathe this pollution in, these particles can reach the deepest regions of our lungs and move past our bodies' filtering systems. Human exposure to particle pollution is linked to a variety of significant health problems. Particle pollution also is the main cause of visibility impairment in the nation's cities and national parks.

Extensive peer-reviewed science, researched over many decades, shows that there are serious health effects associated with particle pollution. Prior to 1987, EPA standards targeted particles generally smaller than 25-45 micrometers. We revised the standards in 1987 to focus on those particles smaller than 10 micrometers (PM10) because those are the particles that can be inhaled and can lodge in the lungs. By comparison, a human hair is 70 micrometers in diameter.

In 1997, EPA added a national ambient air quality standard specifically for fine particles, which are those particles smaller than 2.5 micrometers (PM2.5). Fine particles can be emitted directly or they can form from chemical reactions of gases such as sulfur dioxide, nitrogen dioxide and some organic gases. Sources of fine particle pollution (or the gases that contribute to fine particle formation) include power plants, gasoline and diesel engines, wood combustion, high-temperature industrial processes such as smelters and steel mills, and forest fires. The science continues to show that fine particles cause serious health effects, and can lead to premature death, increased hospital admissions and emergency room visits for heart attacks and strokes, and development of chronic respiratory disease. Nationally, EPA estimates that exposure to fine particles results in, among other effects, 130,000 – 320,000 excess deaths in adults (5.4% of all deaths), 110,000 emergency room visits by children, 200,000 cases of acute bronchitis in children, 2.5 million cases of exacerbation of asthma and 18 million lost work days each year.[1]

After EPA set the fine particle standards in 1997, the existing daily PM10 standards remained in place to provide continued protection against exposures to coarse particles -- those particles measuring between 2.5 and 10 micrometers in diameter. The daily PM10 standards were adopted again by the EPA in 2006 and upheld by the U.S. Court of Appeals for the District of Columbia in 2009.[2] Sources of coarse particles include road dust kicked up by traffic (called resuspended dust), construction and demolition activities, some industrial and agricultural operations, and biological sources. Coarse particles have been linked to a variety of adverse health effects, including hospital visits related to cardiovascular and respiratory disease, and premature death. While the body of scientific evidence is much more limited for coarse PM than that for fine particles, the Agency's review of the studies indicates that short-term exposures to coarse particles remain a concern.

EPA is currently in the statutorily-mandated process of reviewing the underlying science on particulate matter and determining whether to change the particulate matter standards. The Administrator considered this body of evidence, along with analyses prepared by EPA scientists and advice from the independent Clean Air Scientific Advisory Committee, and is prepared to propose to retain the coarse particle standard in place today – the 1987 standard.

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[1] Fann N, Lamson A, Wesson K, Risley D, Anenberg SC, Hubbell BJ. Estimating the National Public Health Burden Associated with Exposure to Ambient $PM_{2.5}$ and Ozone. Risk Analysis; 2011

[2] American Farm Bureau v. EPA, 559 F. 3d 512, 531-537 (D.C. Cir. 2009).

We remain committed to common sense approaches to improving air quality across the country without placing undue burden on our farmers. The EPA recognizes that the U.S. Department of Agriculture (USDA) has been working with the agricultural community to develop conservation systems and activities to control coarse particle emissions. The EPA will continue to work with USDA to prioritize the development of these new systems and activities to improve air quality throughout the U.S. without placing undue burden on our nation's farmers and ranchers.

We have been making steady progress in reducing levels of particulate matter in the air – both fine and coarse – in this country for more than two decades, improving the public health of Americans while the economy has continued to grow. Only 39 counties in the United States are classified as nonattainment for PM10. EPA's implementation of the 1987 PM10 standard has resulted in improvements in air quality and not resulted in the dire outcomes that opponents sometimes predict. For example, monitoring information for PM10 illustrates the improvement. The national average ambient PM10 concentrations have improved by 38% from 1990 to 2009. This Clean Air Act program has resulted in significant air quality improvements and public health protections in this country in every Administration over the 24 years since the PM10 standard went into place.

Comments on H.R. 1633

To the extent that this bill was intended to avert effects on agricultural operations that might have resulted from a change in the PM10 standard, the sponsors' concerns should be allayed by the Administrator's commitment that she is prepared to propose to keep the PM10 standard as it is, with no change.

As drafted, however, the bill does far more than prevent a change in the coarse particle standard. We believe it could result in far reaching damage to the bedrock public health protections in the Clean Air Act.

Section 3 of H.R. 1633 takes the very broadly defined "nuisance dust" out of the Clean Air Act. While "nuisance dust" sounds like it is merely inconvenient, that is not the case. As defined in the bill, "nuisance dust" includes both fine and coarse particle pollution that is harmful to public health. Section 3 could be interpreted to undermine many of the public health protections currently in the Act and could prevent reductions of PM2.5 from industrial activities in urban areas.

For example, section 3 raises issues regarding whether or how EPA could continue to implement even the existing fine particle and coarse particle standards. Since the existing particle programs do not distinguish between "nuisance dust" and other particles, the bill raises the issue of whether the EPA could enforce or maintain existing fine or coarse particle pollution standards.

Furthermore, unlike the terms “fine particle” and “coarse particle,” the term “nuisance dust” is not a scientific or scientifically-defined term. It would be very difficult to incorporate an exclusion for “nuisance dust” into a scientifically-based program. This could raise practical problems. For example, monitoring air quality is an essential element of the ambient air quality program; it is how we determine which areas have healthy air and which do not. It is unclear how one could design a monitor that measured “fine particles except for nuisance dust,” and it is unclear how the Agency could implement particle pollution programs without a scientifically sound monitoring network.

The effect of section 3 would extend beyond the ambient air quality program, and could prevent the regulation of major sources of air pollution in urban and suburban areas, as well as rural areas. The bill defines “nuisance dust” to include “particulate matter generated from . . . activities typically conducted in rural areas.” It is not unusual to see coal-fired power plants, mining operations, industrial operations, and construction, among other activities, in rural areas. We would expect to hear arguments that “particulate matter generated from” these types of activities would include not only direct emissions of particles, but also emissions of precursors such as sulfur dioxide and nitrogen dioxide. If these arguments were successful, it could have far-reaching consequences, such as forever barring the EPA from limiting power plants’ emissions of coarse particles, fine particles, sulfur dioxide, nitrogen oxides, and mercury.

Section 2 is also problematic. While it might appear to be consistent with the Administrator’s coarse particle announcement, it arguably does much more. As currently drafted, it might also prevent the EPA from revising the fine particle standards for one year because it prevents the revision of a national ambient air quality standard “applicable to PM with an aerodynamic diameter greater than 2.5 micrometers.” The EPA’s regulation of fine particles, or PM2.5, is consistent with the scientific studies on which the standards are based. The monitors used for the many research studies underlying the PM 2.5 standards and for enforcing the PM 2.5 standards measure particles that include a small percentage of particles that are somewhat larger than 2.5 micrometers. This is by design, as the human respiratory system also allows some larger particles into the lungs as we breathe in. If this bill were to be enacted, EPA might be prevented from revising the fine particle standards because the current standards regulate, and our current scientific assessment is based on the public health consequences of, “fine particles” that include some particles larger than 2.5 micrometers in diameter.

The Clean Air Act

This bill would block programs that have been part of, or would continue, the 40-year Clean Air Act success story. For 40 years, the Clean Air Act has allowed steady progress to be made in reducing the threats posed by pollution and allowing us all to breathe easier. In the last year alone, programs implemented pursuant to the Clean Air Act Amendments of 1990 are estimated to have reduced premature mortality risks equivalent to saving over 160,000 lives; spared Americans more than 100,000 hospital

visits; and prevented millions of cases of respiratory problems, including bronchitis and asthma.[3] They also enhanced productivity by preventing 13 million lost workdays; and kept kids healthy and in school, avoiding 3.2 million lost school days due to respiratory illness and other diseases caused or exacerbated by air pollution.[4]

However, few of the emission control standards that gave us these huge gains in public health were uncontroversial at the time they were developed and promulgated. Most major rules have been adopted amidst claims that that they would be bad for the economy and bad for employment.

Some may find it surprising that the Clean Air Act also has been a good economic investment for our country. In contrast to doomsday predictions, history has shown, again and again, that we can clean up pollution, create jobs, and grow our economy all at the same time. Over that same 40 years since the Act was passed, the Gross Domestic Product of the United States grew by more than 200 percent.[5]

Some would have us believe that "job-killing" describes EPA's regulations. It is misleading to say that enforcement of the Clean Air Act is bad for the economy and employment. It isn't. Families should never have to choose between a job and healthy air. They are entitled to both.

A study led by Harvard economist Dale Jorgenson found that implementing the Clean Air Act actually increased the size of the US economy because the health benefits of the Clean Air Act lead to a lower demand for health care and a healthier, more productive workforce. According to that study, by 2030 the Clean Air Act will have prevented 3.3 million work days lost and avoided the cost of 20,000 hospitalizations every year.[6] Another study that examined four regulated industries (pulp and paper, refining, iron and steel, and plastic) concluded that, "We find that increased environmental spending generally does not cause a significant change in employment."[7]

The EPA's updated public health safeguards under the Clean Air Act will encourage investments in labor-intensive upgrades that can put current unemployed or under-employed Americans back to work. Environmental spending creates jobs in engineering, manufacturing, construction, materials, operation and maintenance. For

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[3] USEPA (2011). The Benefits and Costs of the Clean Air Act from 1990 to 2020. Final Report. Prepared by the USEPA Office of Air and Radiation. February 2011. Table 5-5. This study is the third in a series of studies originally mandated by Congress in the Clean Air Act Amendments of 1990. It received extensive peer review and input from the Advisory Council on Clean Air Compliance Analysis, an independent panel of distinguished economists, scientists and public health experts.

[4] Ibid.

[5] Bureau of Economic Analysis, National Economic Accounts, "Table 1.1.5. Gross Domestic Product," http://bea.gov/national/index.htm#gdp

[6] Dale W. Jorgenson Associates (2002a). *An Economic Analysis of the Benefits and Costs of the Clean Air Act 1970-1990. Revised Report of Results and Findings.* Prepared for EPA. http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0565-01.pdf/$file/EE-0565-01.pdf

[7] Morgenstern, R. D., W. A. Pizer, and J. S. Shih. 2002. "Jobs versus the Environment: An Industry-Level Perspective." *Journal of Environmental Economics and Management* 43(3):412-436.

example, EPA vehicle emissions standards directly sparked the development and application of a huge range of automotive technologies that are now found throughout the global automobile market. The vehicle emissions control industry employs approximately 65,000 Americans with domestic annual sales of $26 billion.[8] Likewise, in 2008, the United States' environmental technologies and services industry 1.7 million workers generated approximately $300 billion in revenues and led to exports of $44 billion of goods and services[9], larger than exports of sectors such as plastics and rubber products.[10] The size of the world market for environmental goods and services is comparable to the aerospace and pharmaceutical industries and presents important opportunities for U.S. Industry.[11]

Jobs also come from building and installing pollution control equipment. For example, the U.S. boilermaker work force grew by approximately 35 percent, or 6,700 boilermakers, between 1999 and 2001 during the installation of controls to comply with EPA's regional nitrogen oxide reduction program.[12] Over the past seven years, the Institute for Clean Air Companies (ICAC) estimates that implementation of just one rule – the Clean Air Interstate Rule Phase 1 – resulted in 200,000 jobs in the air pollution control industry.[13] Similar effects have been recognized by the electric power industry as well. In a letter to the editor in the Wall Street Journal, eight major utilities that will be affected by our greenhouse gas pollution standards said, "Contrary to claims that EPA's agenda will have negative economic consequences, our companies' experience complying with air quality regulations demonstrates that regulations can yield important economic benefits, including job creation, while maintaining reliability."[14]

Conclusion

I have described just some of the potential consequences of H.R. 1633. If these consequences are intended and the bill were interpreted accordingly, then H.R. 1633 would significantly weaken EPA's authority under the Clean Air Act, and significantly and adversely harm public health. If these consequences are not intended, it would be best to clarify and revise the bill to avoid the confusion and litigation that would occur if this bill were enacted.

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[8] Manufacturers of Emissions Control Technology (http://www.meca.org/cs/root/organization_info/who_we_are)
[9] DOC International Trade Administration. "Environmental Technologies Industries: FY2010 Industry Assessment. http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c/$FILE/Full%20Environmental%20Industries%20Assessment%202010.pdf (accessed February 8, 2011)
[10] U.S. Census Bureau, Censtats Database, International Trade Data--NAICS, http://censtats.census.gov/naic3_6/naics3_6.shtml (accessed September 6, 2011)
[11] Network of Heads of the European Environment Protection Agencies, 2005. "The Contribution of Good Environmental Regulation to Competitiveness." http://www.eea.europa.eu/about-us/documents/prague_statement/prague_statement-en.pdf (accessed February 8, 2011).
[12] International Brotherhood of Boilermakers, *Boilermaker Labor Analysis and Installation Timing*, March 2005, EPA Docket OAR-2003-0053 (docket of the Clean Air Interstate Rule).
[13] November 3, 2010 letter from David C. Foerter, Executive Director of the Institute of Clean Air Companies, to Senator Thomas R. Carper (http://www.icac.com/files/public/ICAC_Carper_Response_110310.pdf (accessed February 8, 2011).
[14] December 8, 2010 WSJ "We're OK With the EPA's New Air Quality Regulations"

I hope the information in the Administrator's October 14, 2011 letter and my testimony today clarifies EPA's intentions and obviates the need for this legislation.