



April 29, 2008

Steve Page, Director Office of Air Quality Planning and Standards U.S. Environmental Protection Agency Mail Code: C404-04 Research Triangle Park, North Carolina 27711

Re: Performance Standards for Wood -burning Devices

Dear Mr. Page:

The Western States Air Resources Council (WESTAR) and the Northeast States for Coordinated Air Use Management (NESCAUM) strongly urge the U.S. Environmental Protection Agency (EPA) to update and develop regulations relating to a variety of wood combustion devices. The recently revised National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM_{2.5}) recognizes the public health dangers of excessive fine particulate matter. Unfortunately, many communities throughout the country are measuring ambient conditions above or very close to that new standard. In many instances, emissions from wood smoke are a significant contributor to those high PM_{2.5} levels.

Currently, federal regulations only target a limited universe of wood burning sources, via the New Source Performance Standards (NSPS) for residential wood heaters (i.e., indoor wood stoves), major New Source Review, and the Maximum Achievable Control Technology (MACT) program for boilers. These regulations, along with state and local minor source permitting, exempt a significant number of devices that greatly, and adversely, affect the environment and public health.

Indoor Residential Wood Heating Devices

The Residential Wood Heater NSPS, which was developed in 1988 and implemented fully by 1992, set emission standards for indoor wood stoves but excluded a broader suite of residential wood heating devices (RWDs). In addition, wood heat technology has advanced significantly since the existing standards were phased in almost twenty years ago. New technologies for regulated RWDs are commercially available now in the U.S. that perform at significantly lower grams-per-hour emission rates than required under the existing indoor wood stove standard. Furthermore, even greater performance can be

achieved by technologies employed in Europe. The Clean Air Act requires review of a NSPS every eight years unless determined "that review is not appropriate in light of readily available information on the efficacy of such standard." At a minimum, given the current body of evidence, review and revision of the current residential wood heater/indoor wood stove NSPS to capture the broader suite of RWDs is appropriate and warranted.

A critical concern of our states is the lack of regulations for a broad variety of RWDs that are available for sale and not addressed by the NSPS at all; these include fireplaces, masonry heaters, pellet stoves, and indoor and outdoor wood boilers, furnaces, and heaters. These devices are making their way to market and we urge EPA to develop standards for them.

As many state and local agencies move forward with strategies to meet the revised $PM_{2.5}$ NAAQS, they are implementing new or enhancing their existing "wood stove change-out" programs. These efforts will reduce the number of high-polluting uncertified wood stoves in local communities. Without new and revised standards, however, newly installed devices may not be the cleanest available in the marketplace. Ensuring that the change-out programs are replacing uncertified stoves with the cleanest-burning devices available in the marketplace would assure that public and private dollars are spent wisely and on the best possible public health and pollution control outcomes.

In addition, we urge EPA to expand change-out efforts to include other RWDs by supporting change-outs of all outmoded RWD technologies. To support that outcome, we ask EPA to update and develop standards for RWDs in the same manner that emission standards are updated for mobile source technologies. Newer models should be required to meet lowered emission limits as technology permits, creating a cleaner "fleet" of devices over time. Given that cleaner-burning technologies are readily available in the marketplace, it is a lost public health opportunity to allow the continued manufacture and sale of equipment with low-end, higher-polluting technology that will remain in homes for years to come.

Outdoor Residential Wood Heating Devices

One significant area of concern is outdoor wood-fired boilers (or outdoor wood-fired hydronic heaters -- OWHHs). These units represent a new and growing public health concern in both the East and West. They can be highly-polluting and, when improperly used, subject neighbors, neighborhoods, and entire communities to serious impacts from particulate matter and products of incomplete combustion. While EPA's voluntary program has made great progress towards encouraging the development of cleaner OWHHs, it has not banned the sale of new units with older, dirtier designs and is not a mandatory program. We therefore urge EPA begin efforts to develop a technical basis for regulating emissions from these devices.

Small Commercial and Institutional Wood Boilers

We also urge EPA to develop emission standards for small commercial and institutional wood boilers, especially those being marketed for use in schools and hospitals. As the price of fossil fuels increases, many schools and hospitals are considering or installing wood-fired boilers. In many instances, these units are replacing natural gas-fired boilers that emit less particulate matter and other criteria and air toxic pollutants than wood-fired boilers. For example, a report developed for Wisconsin Division of Energy reported that more than 300 schools -- representing more than 25 percent of the schools currently heating with natural gas -- would find it economically beneficial to switch to wood-fired boilers. Schools, however, are receiving little to no information on the adverse health effects caused by smoke from these boilers, nor are they told of the potential costs of future air pollution control equipment once these dirtier boilers are installed.

Unfortunately, technical data characterizing emissions from these units and analyses regarding the efficacy of pollution controls is lacking. This impedes both state and federal activities to properly address these emission sources. Therefore, it is critical that EPA direct resources to properly investigate this issue. As energy and forestry programs move forward with their support of these programs, and as we move towards greater use of biomass resources for space heating purposes, we must have methods to ensure protection from exposure to toxic and criteria air pollutant emissions. We therefore urge EPA to immediately invest in analyses to create a technical basis for characterizing wood boiler emissions to support state and federal regulations for these units.

Conclusion

In light of the new PM_{2.5} NAAQS and the preponderance of wood smoke as a source of fine particle pollution in the U.S., further tightening of standards for wood heating appliances is essential. Improved standards for new wood heating devices would provide a much needed tool for states and local communities to use in addressing the growth of pollution from these sources. Typically, EPA regulations take six to seven years to complete. If EPA were to begin work now on a NSPS, a likely implementation date would be around 2015. However, many federal, state, and local agencies are making investments in renewable energy programs now. If not implemented properly, these programs are likely to encourage increases in air pollution, especially air toxics and particulate matter. Therefore, it is essential that EPA provide guidance now during this crucial time.

We urge you to move forward promptly on these important issues. We would be happy to meet with you to discuss this issue in greater detail. If you have any questions, please contact either Arthur Marin at 617-259-2017 or Dan Johnson at 206-254-9145.

Sincerely,

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Arthur Marin, Executive Director NESCAUM

Rob Brenner cc: Greg Green

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Dan Johnson, Executive Director WESTAR