From:

Nancy F. Parks [nfparks2@verizon.net] Tuesday, February 09, 2010 4:12 PM

Sent: To:

EP, RegComments

Subject:

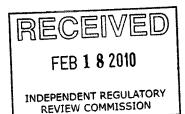
Comments 39Pa.B.6068, Saturday, October 17, 2009, Outdoor Wood Fired Boilers

Attachments:

OWB comments Feb 2010.rtf

Importance:

High



February 5, 2010

201 West Aaron Square PO Box 120 AAronsburg, PA 16820-0120 nfparks2@verizon.net

Environmental Quality Board PO Box 8477 400 Market Street Harrisburg, PA 17101-2301 RegComments@state.pa.us

> Comments Re: Proposed Rulemaking, 39Pa.B.6068 Saturday, October 17, 2009 Outdoor Wood Fired Boilers

The Sierra Club, Pennsylvania Chapter supports the regulation controlling emissions from new outdoor wood fired boilers in Pennsylvania that is proposed in 39 Pa. B.6068, with the additions that I describe below.

Introduction

In the last ten years, Pennsylvania has become the 6th largest seller of outdoor wood boilers in the United States, which in turn emit PM2.5 and organic toxic pollutants from these outdoor wood-fired boilers [OWB], with part or all of 23 Pennsylvania counties involved in PM 2.5 nonattainment across the state. A significant portion of PM 2.5 pollution comes from OWBs. Wood fired boilers are notoriously uncontrolled, and contaminate ambient air in both urban and rural Pennsylvania, a problem for any area with a concentrated population. These 'small' sources together make a big impact. OWBs have become a magnet for complaints against neighbors, as families look for an alternative to fossil fuel fired heat and hot water. Even in winter, nearby neighbors experience air pollution seeping through closed windows and doors. Complaints include smoke, odors, the burning of prohibited fuels, garbage, tires, electronics and hazardous waste such as foam and other plastics.

A cyclic operating process creating an on/off burn cycle plus incomplete combustion of the wood fuel can release carcinogenic benzene, formaldehyde, dioxin, and polycyclic aromatic hydrocarbons in addition to PM 2.5.[1] NESCAUM - NE States for Coordinated Air Use Management - completed field tests that found OWBs emit twenty times more PM2.5 than EPA's certified indoor woodstoves, and OWB can emit as much particulate matter as 50 to 500 diesel trucks, depending on their age, engine condition, and existing onboard controls. NESCAUM field testing found that OWB polluted at an emission rate of 161 grams per hour in a 250,000 BTU unit with a 50% fuel charge. In comparison, NESCAUM estimated that model year 2001 trucks emitted 3 g/hr

PM when idling, and that current diesel engine trucks with particulate filters emitted 0.3 g/hr when idling. Uncontrolled OWB PM2.5 emissions are equivalent to 205 oil burning furnaces and 8000 natural gas furnaces. The smallest OWB on the market has the potential to emit one and one half tons of PM2.5 each year.

NEED FOR REGULATORY ACTION

PADEP in its analysis to the IRRC #2802 [PADEP ID# 7-444] in 2009 estimated that there could be 40,000 uncontrolled OWB in PA by 2010. This has obvious implications for continued or even increases in PM nonattainment in Pennsylvania. A state regulation is necessary to assure the success of our state's attainment obligations under our current SIP. State regulatory action involving OWB would also ensure increased protection of human health from PM 2.5, smoke and toxic pollutant exposures; and additionally, mediate acute episodes of locally drastically reduced visibility, reduce the pollution load, alleviate the need for a patchwork of local municipal controls across Pennsylvania, alleviate the local cost of developing and enforcing municipal ordinances, and reduce the certainty that some PA counties - such as Centre County - will trigger new PM 2.5 nonattainment in the near future, due to uncontrolled or under-controlled OWB emissions.

ADDITIONS TO THE PROPOSED REGULATION

The Sierra Club would suggest that Pennsylvania's regulation should include provisions to phase-in controls on existing units especially those in nonattainment areas, and also to provide seasonal protection from OWB emissions. OWBs should be prohibited from being used between April 1 - October 31 in both Pennsylvania PM 2.5 nonattainment areas and in any population center that is a village, town, borough or city in Pennsylvania. Additionally, the regulation should prohibit OWB owner/operators along the state boundaries from burning within 500 feet of the boundary line of a residence, nursing home, hospital, day care center or school in another state. In Pennsylvania, we should also include this type of provision to protect our own most vulnerable citizens, those residing in nursing homes and hospitals, and those attending schools and day care centers.

PADEP would also be wise to fund an education program for existing OWB owner/operators to explain the hazards of uncontrolled emissions, and the benefits of controlling OWB emissions.

The Sierra Club believes that it is appropriate and in fact vital to spell out within the definition of clean wood that there is no contamination allowed by any toxin listed by the federal government within the Clean Air Act, Clean Water Act, RCRA or Superfund, or any other applicable federal or Pennsylvania state law, such as the PA Air Pollution Control Act.

In conclusion, PADEP's analyses of costs associated with compliance show a very reasonable and affordable solution to the growing OWB problem.

Sincerely,

Nancy F. Parks Chair, Clean Air Committee Sierra Club Pennsylvania Chapter

EQB SUMMARY WOOD FIRED BOILERS

- The Sierra Club, Pennsylvania Chapter supports the regulation controlling emissions from new outdoor wood fired boilers in Pennsylvania that is proposed in 39 Pa. B.6068, with additions;
- 40,000 uncontrolled OWBs are predicted in PA by 2010, with obvious implications for continued or even increases in PM nonattainment in Pennsylvania;
- Many Complaints include smoke, odors, the burning of prohibited fuels, garbage, tires, electronics and hazardous waste such as foam and other plastics; a cyclic operating process creating an on/off burn cycle plus incomplete combustion of the wood fuel can release carcinogenic benzene, formaldehyde, dioxin, and polycyclic aromatic hydrocarbons in addition to PM 2.5;
- uncontrolled OWB PM2.5 emissions are equivalent to 205 oil burning furnaces and 8000 natural gas furnaces. The smallest OWB on the market has the potential to emit one and one half tons of PM2.5 each year;
- state regulatory action involving OWBs would ensure increased protection of human health from PM 2.5, smoke and toxic pollutant exposures, mediate acute episodes of locally drastically reduced visibility, reduce the pollution load, alleviate the need for a patchwork of local municipal controls across Pennsylvania, alleviate the local cost of developing and enforcing municipal ordinances, and reduce the certainty that some PA counties will trigger new PM 2.5 nonattainment in the near future, due to uncontrolled or under-controlled OWB emissions.
- The Sierra Club suggests that Pennsylvania's regulation should include provisions to <u>phase-in</u> <u>controls on existing units</u>, provide seasonal protection from OWB emissions by prohibiting units from being used between April 1 October 31 in Pennsylvania PM 2.5 nonattainment areas and in any population center that is a village, town, borough or city;
- the regulation should prohibit OWB owner/operators along the state boundaries from burning within 500 feet of the boundary line of a residence, nursing home, hospital, day care center or school in another state;
- · In Pennsylvania, do the same; protect those residing in nursing homes and hospitals, and those attending schools and day care centers;
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- In conclusion, PADEP's analyses of costs associated with compliance show a very reasonable and affordable solution to the growing OWB problem.
- [1] NESCAUM. Northeast States for Coordinated Land Use Management. 2009. <u>Outdoor Wood Boiler Fact Sheet.</u>

Nancy F. Parks Chair, Clean Air Committee, Chapter At-Large delegate, Council of Club Leaders Delegate, Bernheim Committee Chapter Reserve Funds Committee Pennsylvania Chapter (1982 - 2010) Sierra Club national Air Committee chair (1995-97) & senior advisor [1998-2010]

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814-880-0290 (only call this when I'm traveling & not home)

[&]quot;Nothing that I can do will change the structure of the universe. But maybe, by raising my voice I can help the greatest of all causes — goodwill among men and peace on earth" — Albert Einstein "Out of the ashes flies the phoenix"

[&]quot;Citizenship is what makes a republic; monarchies can get along without it. What keeps a republic on its legs is good citizenship." (Mark Twain)

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