



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

MEMORANDUM

DAVID P. LITTELL
COMMISSIONER

TO: Board of Environmental Protection
FROM: Ron Severance, Bureau of Air Quality (with handwritten initials RWS)
DATE: March 18, 2010
RE: Adoption: Chapter 150 Control of Emissions from Outdoor Wood Boilers and Chapter 160 Outdoor Wood Boiler Replacement and Buy Back Program (both rules amended pursuant to Public Law, Chapter 209)

Statutory and Regulatory Reference:

A. Statutory authority.

38 MRSA Section 585-A provides that the Board of Environmental Protection "may establish and amend regulations to implement ambient air quality standards and emission standards. These regulations shall be designed to achieve and maintain ambient air quality standards and emission standards within any region and prevent air pollution."

38 MRSA Section 610-C establishes an outdoor wood boiler fund which is a nonlapsing fund administered by the commissioner to be used by the Department to upgrade, purchase and replace outdoor wood boilers that create a nuisance condition as defined in the Department's rules or threat to public health or safety.

B. Specific legal mandates requiring adoption.

38 MRSA Section 610-B establishes particulate emission standards for outdoor wood boilers sold in Maine beginning April 1, 2008 and directs the Department to adopt rules that regulate the sale, installation, siting, operation, labeling and use of outdoor wood boilers, also known as outdoor wood-fired hydronic heaters.

Public Law, Chapter 209 LD 1171, An Act to Amend the Laws Governing Outdoor Wood Boilers, enacted May 19, 2009, signed by the Governor May 26, 2009, effective September 12, 2009 (attached) directs the Department to amend Chapter 150 and Chapter 160 as described below.

Location/Applicability:

The proposed regulations will apply statewide.

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Description:

In May 2009, the Legislature enacted Public Law, Chapter 209 LD 1171, An Act to Amend the Laws Governing Outdoor Wood Boilers. This legislation requires that the Board adopt the following rule amendments to Chapter 150 Control of Emissions from Outdoor Wood Boilers and Chapter 160 Outdoor Wood Boiler Replacement and Buy Back Program in several areas.

Outdoor wood boiler installation: It changes the qualifications for those who prepare an evaluation, report and installation recommendations from a professional engineer to a qualified professional, including a professional engineer or a master solid fuel technician. (Section 6-1 of Public Law 209; amend Chapter 150)

Commercial outdoor wood boiler definition: The definition of commercial outdoor wood boiler is amended to exclude outdoor wood boilers used solely for space heating or domestic hot water. (Section 6-2 of Public Law 209; amend Chapter 150)

Outdoor wood boiler fund eligibility: A person who upgrades or replaces a nuisance outdoor wood boiler when money is not available from the Outdoor Wood Boiler Fund is eligible for reimbursement from the fund when money becomes available if that person has met certain requirements. (Section 6-3 of Public Law 209; amend Chapter 160)

In addition, the Department recommends that the Board amend Chapter 150 Control of Emissions from Outdoor Wood Boilers and Chapter 160 Outdoor Wood Boiler Replacement and Buy Back Program in the following areas in order to harmonize these regulations with statutory changes made by Public Law 209:

Outdoor wood boiler definition: The definition of outdoor wood boiler is amended to include biomass fuel products, fuel burning devices that use hot air, and clarifies that indoor-rated devices housed in a modular or containerized structures fall under the outdoor wood boiler definition. (Sections 1, 2, and 3 of Public Law 209; amend Chapter 150)

Voluntary, technology-forcing emission standard: An outdoor wood boiler meeting a particulate matter emission limit of 0.06 lbs/MMBtu heat output is not subject to a setback requirement as long as it meets the stack height requirements for boilers meeting the Phase 2 emission standard that takes effect April 1, 2010. (Section 4 of Public Law 209; amend Chapter 150)

Outdoor wood boiler fund date: To qualify for boiler replacement a nuisance outdoor wood boiler does not need to have been installed prior to February 1, 2008. (Section 5 of Public Law 209; amend Chapter 160)

During the comment period no comments were received on the amendments to Chapter 160 and only two comments from one commenter were received that specifically addressed the Chapter 150 amendments. No changes were made to the rule.

Environmental Issues:

In addition to fine particulates, wood combustion emissions contain sulfur oxides, nitrogen oxides, carbon monoxide and potentially cancer-causing compounds including formaldehyde, polycyclic aromatic hydrocarbons, benzene and dioxins. Fine particulates can aggravate lung diseases such as asthma, emphysema and bronchitis. Children, the elderly and those with respiratory problems are most at risk from exposure to wood smoke.

Departmental Recommendation:

The Department recommends that the Board adopt the rules as presented.

Estimated Time of Presentation:

15 minutes

PLEASE NOTE: Legislative Information *cannot* perform research, provide legal advice, or interpret Maine law. For legal assistance, please contact a qualified attorney.

An Act To Amend the Laws Governing Outdoor Wood Boilers

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §582, sub-§8-C, ¶A, as enacted by PL 2007, c. 442, §1, is amended to read:

A. Designed to burn wood, biomass fuel products or other solid fuels;

Sec. 2. 38 MRSA §582, sub-§8-C, ¶B, as enacted by PL 2007, c. 442, §1, is amended to read:

B. That the manufacturer specifies for outdoor installation or in structures not normally occupied by humans or is an indoor-rated device housed in a modular or containerized structure; and

Sec. 3. 38 MRSA §582, sub-§8-C, ¶C, as enacted by PL 2007, c. 442, §1, is amended to read:

C. That heats building space ~~and/or~~ water, or both, through the distribution, typically through pipes for a fluid or ducts for air, of a fluid or air heated in the device, ~~typically water or a mixture of water and antifreeze.~~

Sec. 4. 38 MRSA §610-B, sub-§2-A is enacted to read:

2-A. Voluntary, technology-forcing emission standard. An outdoor wood boiler meeting a particulate matter emission limit of 0.06 pounds per million British Thermal Units heat output is not subject to a setback requirement as long as it meets the stack height requirements for an outdoor wood boiler meeting the emission standard in subsection 2 in accordance with rules adopted by the department.

Sec. 5. 38 MRSA §610-C, sub-§3, as enacted by PL 2007, c. 680, §2, is amended to read:

3. Application of fund. The department shall apply the money in the fund toward the upgrade, purchase and replacement of outdoor wood boilers ~~installed prior to February 1, 2008 and~~ determined by the department to constitute a nuisance condition or threat to public health or safety. The department shall adopt rules that include, but are not limited to, criteria for determining whether an outdoor wood boiler constitutes a nuisance condition or threat to public health or safety and is eligible for use of the fund, compensation criteria and amounts and procedures for certification and verification of removal and possible replacement of eligible outdoor wood boilers. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 6. Outdoor wood boiler rules. The Department of Environmental Protection shall adopt rule amendments to Chapter 150: Control of Emissions from Outdoor Wood Boilers, a rule of the Department of Environmental Protection, Bureau of Air Quality Control, that:

1. Change the current requirement that any person intending to install or operate a commercial outdoor wood boiler must obtain an evaluation, a report and installation recommendations from a

professional engineer to a requirement that the evaluation, report and installation recommendations must be obtained from a qualified professional, including a professional engineer or a master solid fuel burner technician;

2. Amend the definition of "commercial outdoor wood boiler" to exclude outdoor wood boilers used solely for space heating or domestic hot water; and

3. Allow a person who upgrades or replaces a nuisance outdoor wood boiler when money is not available from the Outdoor Wood Boiler Fund to be eligible for reimbursement from the fund when money is available.

Notwithstanding anything to the contrary in the Maine Revised Statutes, Title 5, chapter 375, subchapter 2-A and Title 38, section 610-B, last paragraph, the Department of Environmental Protection is not required to hold hearings or conduct other formal proceedings prior to adopting the rules amendments in accordance with subsections 1 and 2. Notwithstanding Title 38, section 610-B, last paragraph, the initial rule amendments adopted pursuant to subsection 3 are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A. After adoption of the initial rule amendments pursuant to this section, any further rule amendment adopted pursuant to this section is considered a major substantive rule and is subject to legislative review in accordance with Title 5, chapter 375, subchapter 2-A.

Effective September 12, 2009

SUPPLEMENTAL BASIS STATEMENT
CHAPTER 150 CONTROL OF EMISSIONS FROM OUTDOOR WOOD BOILERS
MARCH 18, 2010

Commenter

Ernest Grolimund
Waterville

1. Comment: It is not good to exclude outdoor wood boilers used solely for space heating or domestic hot water from the definition of commercial outdoor wood boiler.

Response: The Department included the exception because an outdoor wood boiler that is used for space heating and domestic hot water at a commercial location is similar to an outdoor wood boiler at a residence. Outdoor wood boilers that provide hot water for commercial activities, such as car washes and laundries, need to be evaluated for proper heat load requirements to minimize excess particulate emissions. An evaluation is not financially justified, nor is it necessary, for the installation of a smaller outdoor wood boiler at a home business.

2. Comment: The commenter does not believe a licensed solid fuel technician will be able to understand the environmental impact of installing a huge biomass boiler for a commercial paper plant or campus biomass boiler.

Response: The Department believes a master solid fuel burner technician is qualified to determine the proper installation of commercial outdoor wood boilers and those with a rated thermal output greater than 350,000 Btu/hr. The Department included this analysis requirement to ensure that appropriate sized boilers were installed for the heat load required at the facility or residence. Installation of improperly sized boilers may cause the boilers to operate inefficiently creating excessive particulate emissions.