

**TOWN OF BELCHERTOWN
BOARD OF HEALTH
REGULATIONS GOVERNING THE INSTALLATION AND OPERATION OF
OUTDOOR WOOD-FIRED BOILERS AND FURNACES**

Findings:

Whereas;

The Belchertown Board of Health does hereby find that: Outdoor Wood Fired Boiler/Furnaces (OWB/F) have been demonstrated to emit dense wood smoke and therefore pose a potential threat to the health and welfare of persons living in proximity of these devices as well as the community at large, by affecting the quality of both indoor and outdoor environments. The relative composition of large quantities of fine particulate matter (PM_{2.5}) presents the most serious health threat. Scientific studies have demonstrated relationships between fine particulate matter and certain health problems including asthma and chronic bronchitis, decreased lung function and shortness of breath, and other acute respiratory problems including coughing and chest tightness. Other public health threats include the exposure to other toxic chemicals including; air pollutants such as carbon monoxide and nitrogen oxides irritants toxic to respiratory cilia such as phenols, cresols, scrolein and acetaldehyde carcinogenic volatile organics (volatile organic compounds (VOC's) such as benzene, formaldehyde and 1,3 butadiene carcinogenic cyclic compounds such as polyaromatic hydrocarbon

Whereas;

The Belchertown Board of Health does hereby find that: The firing and general operation of OWB/F produces smoke often with an opacity in excess of that allowed by 310 CMR 7.06(1) (20%, 2 min during 1 hr/ 40% at any time) and therefore significantly contribute to the development of nuisance conditions.

Accordingly the BOH finds and declares that the purpose of this regulation is to protect the public health and welfare by assuring the optimal siting and operation of these devices and the education of owner-operators in techniques to minimize the production of noxious wood smoke.

1. Authority:

By the authority granted to the Board of Health, pursuant to and in accordance with, Massachusetts General Law Chapter 111, sections 31, 31C and 122, the Belchertown Board of Health hereby enacts the following regulations.

2. Applicability:

These regulations shall apply to each OWB/F installed on or after October 1, 2007. In addition, any existing OWB/ F installed and/or in use prior to the effective date of these regulations has until January 1, 2008 to come into compliance with these regulations.

3. Definitions:

3.1 Outdoor Wood- fired Furnace: an accessory structure or appliance designed to be located outside space ordinarily used for residential, business or industrial purposes, which is designed to provide heat, via liquid or other means,

through the burning of wood, for heating spaces other than where such structure or appliance is located, or for heating domestic, swimming pool, hot tub or Jacuzzi water. "Outdoor wood-burning furnace" does not include a fire pit, wood-fired barbecue or chimney. This definition does not include industrial sized furnace/ boiler plants regulated and permitted by the MA Department of Environmental Protection and which utilized Best Available Control Technology (BACT) for emission control.

3.2 Outdoor Wood- fired Boiler: a wood fired boiler surrounded by a water jacket, in an insulated freestanding shed with a smoke stack and used to heat water that is carried by underground pipes to provide heat to a building. . This definition does not include industrial sized furnace/ boiler plants regulated and permitted by the MA Department of Environmental Protection and which utilized Best Available Control Technology (BACT) for emission control.

3.3 Wood fuel: all wood intended to be used at fuel, including but not limited to trees, cordwood, logs, lumber, sawdust, and wood from manufacturing processes (butt offs, shavings, turnings, sander dust) wood pellets, slabs, clean and untreated pallets. This definition DOES NOT include materials chemically treated with any preservative such as paint, oil base product or pressure treated, trash or garbage, paper products, or demolition material.

3.4 Season wood: wood that has been cut a year and dried at least 6 months, or by other means, to achieve a moisture content (MC) less than 20% by weight.

4. Regulations:

4.1. A permit is required from the Board of Health to use an OWB/F in the Town of Belchertown.

4.2 . Any person desiring to install an OWB/F on or after October 1, 2007 shall apply for a permit from the Board of Health prior to applying for and/or obtaining a permit from the Department of Inspection Services to install and/or use of such OWB/F in the Town of Belchertown. The Board of Health permit process shall include submission of a written application form and payment of the permit fee established by the Board of Health. The application must be accompanied by a site plan prepared by a Professional Land Surveyor or Professional Engineer indicating the proposed OWB/F location, property identification by tax map and parcel, property lines, acreage and zone designation of the parcel to be served by the OWB/F, separation distances between the OWB/F and all buildings and outbuildings on the site of the OWB and all neighboring houses within 500 feet, as well as elevations of the proposed chimney height, and the peaks of all buildings within 500 feet of the proposed OWB/F, together with identification of all roads adjacent to the site, and the distance from the OWB to wooded areas, brush, and flammable structures. Because the provision regarding chimney heights is intended to limit the envelopment of down wind residences by the smoke plume from an outdoor wood-fired boiler/furnace the comparative heights must be referenced to mean sea level (MSL) or by an identified, permanent bench mark established on the property.

4.3. Any person using an OWB/F prior to the effective date of this regulation may continue to use said OWB/F until January 1, 2008. No later than October 1, 2007, any person using an OWB/F prior to the effective date of this regulation

shall apply for a permit from the Board of Health to continue using said OWB/F after January 1, 2008. Said application shall be submitted in accordance with the process set forth in section 4.2 above and shall demonstrate compliance with all sections of these regulations.

4.4. After the effective date of these regulations, no person shall use, install, allow the installation, or acquire through property transfer, an outdoor wood-fired boiler/ furnace (or replace an existing outdoor wood-fired boiler/ furnace that has become inoperable) in the Town of Belchertown, nor shall permits be sought from or issued by the Department of Inspection Services for the installation or substantial modification of an outdoor wood-fired boiler/ furnace unless in full accordance with all of the following provisions:

4.4.a The outdoor wood-fired boiler/ furnace shall be installed and used only in an areas Belchertown zoned Ag-A and Ag-B as delineated on the most current Town of Belchertown Zoning Map.

4.4.b The OWB/F shall meet EPA ~~Phase I~~ **Phase II** * Emission Standards certified to meet a particulate matter emission limit of ~~0.60~~ **0.32*** pounds per million British thermal units (lb/MMBtu).

4.4.c The facility served by the outdoor wood-fired boiler/ furnace shall be located on a parcel of at least 4 acres in size, and

4.4.d The outdoor wood-fired boiler/ furnace shall be located at least 200 feet from the nearest property line and structure other than that served by the OWB/F, and

4.4.e Has an attached permanent stack extending at least 2 feet higher than the peak of the roof of the structure(s) being served by the OWB, and any residence located within 500 feet from the OWB/F, provided the chimney height is not more than 55 feet.

4.4.f. The owner and the operator of the OWB/F has 1.) Successfully passed an examination administered by the Belchertown Board of Health on proper wood burning practices, and 2.) Has signed an acknowledgement that outdoor wood-fired boiler/ furnace, even if operated in accordance with these regulations, may still create nuisance conditions or violate existing visible smoke regulations and therefore may be subject to private nuisance action and/or local or state enforcement action.

4.5. Outdoor wood-fired boiler/furnace shall be operated only between ~~September 15th~~ **October 1st *** and April 30th.

4.6. Only dry (moisture content of less than 20 %), seasoned, untreated wood fuel as defined above may be burned in the outdoor wood-fired boiler/ furnace. Under no circumstances may any starter chemical such as gasoline be used in the outdoor wood burning boiler/furnace.

4.7. No person shall operate an Outdoor Wood-fired Boiler/ Furnace in any manner, which causes a nuisance by interfering with the use and enjoyment of neighboring properties. The Outdoor wood fired boiler/ furnace shall be operated in a manner to prevent or minimize the

occurrence of visible emissions.

5. Enforcement

5.1 The Town of Belchertown Board of Health, and its agents, are authorized to enforce this regulation. Furthermore, consistent with existing Commonwealth of Massachusetts regulations 310 CMR 7.00 , the Town of Belchertown Fire Department, Police Department, and Building Inspector(s) are also authorized to enforce this regulation

5.2 *Permit Suspension or Revocation:*

The Board of Health may suspend or revoke any permit issued pursuant to these regulations for any violation of these regulations, or any other applicable General Law, regulation or by-law. Such revocation or suspension may take place after a hearing held by the Board of Health of which the permit holder is given seven (7) days written notice. Such notice shall be deemed given upon mailing same, certified mail, return receipt requested, to the address listed on the permit application.

5.3 *Non-Criminal Disposition:*

.A non- criminal disposition process as provided in G.L. c.40, §21D and the Town's non-criminal disposition by-law may penalize whoever violates any provision of this regulation.

For the first offense by a written warning.

For the second offense by a fine of \$100.00

For the third offense by a fine of \$200.00

For subsequent offense by a fine of \$300.00 per violation.

Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

5.4 *Other:*

Whoever violates any provision of this regulation may be penalized by indictment or on complaint brought in court. Violations of any order, rule or regulation promulgated or adopted under the provisions of MGL Ch. 111, s. 31C shall be punished, for the first offense, by a fine of not less than one thousand nor more than five thousand dollars and for a subsequent offense, by a fine of not less than five thousand nor more than ten thousand dollars. For the purpose of this paragraph each day or part thereof of violation of such an order, rule or regulation whether such violation be continuous or intermittent, shall be construed as a separate and succeeding offense. Any person aggrieved by the failure of the owner and/or operator of an outdoor wood-fired boiler/ furnace to comply with any provision of these regulations may apply for injunctive relief to enforce the provisions of these regulations in any court of competent jurisdiction.

5.5 The Board of Health may enforce these Regulations or enjoin violations thereof through any lawful process, and the election of one remedy by the Board of Health shall not preclude enforcement through any other lawful means.

6. APPEAL:

An owner may appeal an order to correct a violation of these regulations provided that a written request for a hearing is filed with the Board of Health within seven (7) days of receipt of the violation notice.

7. SEVERABILITY:

If any part, paragraph, provision or section of this regulation is determined by any

Court to be invalid, against public policy, or unconstitutional, said finding shall not affect the legality of the remaining part(s), paragraph(s), provision(s) or section(s) of this regulation which shall continue in full force and effect.

8. VARIANCES:

The Board of Health may vary any provision of these regulations with respect to any particular case, when in its opinion, (1) the enforcement thereof would do manifest injustice, and (2) the applicant has proved that the same degree of protection can be achieved without strict application of the particular provision. All variances shall be considered at a hearing by the Board of Health.

But in no case shall a variance be granted for less than the minimum requirements required by 310 CMR 7.26(50) which requires the OWF/B to have a chimney stack at least 2 feet higher than the roof peaks of all dwellings located within 150 feet of the OWF/B.*

By vote of the Belchertown Board of Health on date July 2, 2007 and amended September 10, 2007

***Superseded by 310 CMR 7.26 (50) effective date 12-26-2008**