

TOWN OF CHELMSFORD
GENERAL PROVISION, CHAPTER 201
BOARD OF HEALTH
ARTICLE XVII
THE CONTROL AND PERMITTING OF
OUTDOOR WOOD BURNING BOILERS, HYDRONIC HEATERS
(Added 9-11-2007, Revised 1-2012, Amended 10-4-2021)

§201.135 Authority

This regulation shall be effective on and after October 15, 2007, and so remain in effect until modified or amended by the Chelmsford Board of Health. It is enacted under authority granted by, but not limited to, Massachusetts General Laws, Chapter 111, sections 31, 31C, 122, 142A through 142 M. Board of Health regulations are an exercise of the police power under which the various levels of government hold responsibility for protection of the public health, safety and welfare.

§201.136 Purpose

This regulation has been enacted by the Board of Health for the purpose of minimizing the human health hazards resulting from the smoke, particulate matter and noxious fumes emitted by outdoor wood burning boilers, to encourage proper techniques in the use and location of these boilers, and to promote the public comfort and convenience.

§201.137 Findings

An Outdoor Wood Burning Boiler (**OWB**), Hydronic Heater, is essentially a wood-fired boiler in a small, insulated, stand alone shed with a smokestack. OWBs heat water that is carried through piping to heat a home or building, domestic hot water, a swimming pool, a Jacuzzi, hot tub, or any other use for this heated water.

Certain types of OWBs have been shown, because of their design, to emit significantly high quantities of smoke, particulate matter, and other noxious fumes. Exposure to particulate matter in smoke from an OWB can increase adverse respiratory and cardiovascular symptoms and exacerbate other harmful health conditions, such as asthmatic sensitivity, lung illnesses and cancer (*Connecticut Department of Environmental Protection, Fact Sheet, July 2004*).

Poor installation, placement, and management of these facilities, plus the use of inappropriate fuel, can increase the harmful effects of the smoke created by the firing of these units.

§201.138 Definitions

- 1) Outdoor Wood Burning Boiler (OWB), Hydronic Heater, a wood fired boiler surrounded by a water jacket and a smoke vent, in an insulated free-standing shed with a smokestack and used to heat water that is carried by pipes to provide heat to a building or any other destinations. Outdoor Wood Burning Boilers do not include fire pits, chimneys, wood fired barbeques or equipment intended exclusively for producing maple syrup, melting, reclaiming, or refining metals.
- 2) Wood Fuel: all wood intended to be used as fuel, including but not limited to seasoned cordwood and wood pellets. (all other products need Board approval) This definition DOES NOT include materials chemically treated with any preservative, adhesive, paint, varnish, or oil.

- 3) Seasoned Wood: wood that has been cut, stacked, and dried for at least 6 months.
- 4) Emission Point: any place (including but not limited to a stack or vent) at or from which any air contaminant is emitted to the ambient air space.
- 5) Odor: property of gaseous, liquid, or solid materials that elicits a physiologic response by human sense of smell.

§201.139 Requirements

- 1) Must meet all minimum standard set by DEP – 310 CMR 7.26 (50) Outdoor Hydronic Heater and the following:
 - 2) Permits and Written Plans
 - a. A permit is required from the Chelmsford Board of Health to install and operate an outdoor wood burning boiler. The permit process shall include submission of a written application form and payment of the permit fee established by the Board of Health, from time to time.
 - b. Permit applicants must demonstrate to the satisfaction of the Board of Health that they understand the requirements for proper installation and operation of an OWB. This includes appropriate permits and signoffs for work done by licensed contractors and inspections required by building, plumbing and electrical inspectors.
 - c. The application must be accompanied by a written site plan indicating the proposed boiler location in relation to all existing structures and separating distances from the boiler to all building and outbuildings on site and all neighboring structures within 400 feet. The plan must also indicate distances to all roads adjacent to the site and distances from the boiler to woods, brush and flammable structures.
 - 3) No residential boiler shall be installed within 50 feet of the house it is serving, 50 feet from any property line, or within 300 feet of any other habitable/occupied structure. A clear radius of 20 feet must be maintained between any OWB and any trees or vegetation of height greater than the height of the top of the fuel feed door.
 - a. Residential variance procedure: An application for a variance from offset to any habitable occupied structure shall be submitted to this Department but shall be no less than 150 feet will not be considered. The Department will not grant any variance to property lines or home to be serviced offsets.
 - b. All abutters within 300 feet must be notified by applicants' expense by certified mail.
 - c. Submit detail plans that show that it is not feasible (not including cost to install).
 - d. Include copy of notice and certified mail receipts.
 - 4) Boilers must have a minimum smokestack height of 20 feet and at least 2 feet higher than the height of the highest abutting residence (actual roof peak) within a radius of 400 feet at the time of installation.

- 5) OWBs may only be operated during the heating season, which for the purpose of these regulations is September 30th to May 16th generally.
 - 6) Only dry, seasoned, untreated wood fuel may be burned in the OWB.
 - 7) The manufacturer's recommendations for the installation and use of the unit must be followed.
 - 8) Boilers installed before the effective date of these regulations may request a waiver from sections of the regulation that they do not meet upon application for a permit. In such cases, a *Construction Permit Application* must be filed with the Board of Health and such installation must be in compliance with all local zoning regulations and state plumbing, and electrical codes. The Board of Health will determine whether to grant the waiver based on the public health, safety, and welfare.
8. The Board of Health shall have the right to take appropriate enforcement or other action, in accordance with Chapter 111 of the Massachusetts General Laws, with respect to any such boiler that it determines constitutes a nuisance or public health risk.

§201.140 Enforcement and Remedies

- 1) If an inspection or examination reveals an OWB is installed or operated in a manner that is not compliant with the above regulations, the Board of Health is authorized to issue notices of violation, cease, and desist orders, and other administrative enforcement orders to compel compliance with these regulations.
- 2) If an inspection or examination determines that an OWB is operated in a manner that constitutes a threat to public health, safety, welfare, a nuisance or cause of odor, filth or sickness, in accordance with Massachusetts General Laws, Ch. 111, the Board of Health or its agent shall issue an order to cease operation of the OWB.
- 3) The Board of Health may take enforcement action deemed appropriate and lawful, including but not limited to criminal prosecution, civil action for injunctive relief or money damages, or both. The Board of Health may levy fines of \$50 for the first offense. Each day of violation shall constitute a separate offense. Any succeeding day of violation may be punished by a penalty of \$250 per day of offense.

§201.141 Severability

Each part of this regulation shall be construed as separate to the end that if any paragraph, sentence, clause, or phrase thereof shall be held invalid for any reason, the remainder of that regulation and all other regulations shall continue in full force.

§201.142 Effective Date

This regulation has been amended, voted on, and unanimously approved at a regularly scheduled Board of Health meeting on October 4, 2021, and will go into effect on October 4, 2021. The changes approved at the Board of Health's October 4, 2021, meeting consisted of administrative re-numbering, no substantive changes to the regulation were made at this time.