

Appendix A: Comparison of Outdoor Wood Boiler Emission Standards and Property Set-back and Stack Height Requirements

Maine's Chapter 150, Control of Emissions from Outdoor Wood Boilers			New Hampshire			Vermont			New York			Federal Regulation 40 CFR Part 60, Subpart QQQQ, Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces	
PM Emission Standard	Set-back Requirements	Stack Height Requirements	PM Emission Standard	Set-back Requirements	Stack Height Requirements	PM Emission Standard	Set-back Requirements	Stack Height Requirements	PM Emission Standard	Set-back Requirements	Stack Height Requirements	PM Emission Standard	Stack Height/Set-back Requirements
Uncertified units or units certified to meet a PM standard higher than 0.60 lb/MMBtu installed on or after 11/9/2007, but prior to 4/2/2008	At least 250 feet from the nearest property line or at least 270 feet from the nearest dwelling that is not on the same property as the outdoor wood boiler	10' above ground level if there are no abutting residences within 500' 2' higher than the structure being served by the unit if an abutting residence is within 500'	Uncertified units installed on or after 8/10/2008, but prior to Phase I requirements	Uncertified units must be located at least 200' from the nearest abutting residence	Stack must extend 2' higher than the peak of the roof of a residence or place of business not served by the unit if located within 300' of the unit	Uncertified units installed prior to Phase I requirements that also do not meet the standards and requirements contained in federal regulation, 40 CFR Part 60, Subpart QQQQ	Units must be located more than 200' from any residence, school, or health care facility that is neither served by the unit nor owned by the owner or lessee of the unit	Stack must extend higher than the peak of the roof of the structure being served by the unit if any residence not owned by the owner of the unit is more than 200' but less than 500'	Uncertified units commencing operation prior to 4/15/2011	No minimum set-back requirements	No minimum stack height requirements	Residential Hydronic Heaters manufactured, imported, or sold on or after 5/15/2015 must be certified to meet a PM standard of 0.32 lb/MMBtu on a heat output basis	The federal regulations contain no specific minimum stack height or property set-back requirements, only that the owner's manuals contain guidance on proper installation information, including stack height, heater location and achieving proper draft.
Phase I units certified to meet a PM standard of 0.60 lb/MMBtu on a heat output basis installed after 4/1/2008	At least 100 feet from the nearest property line or at least 120 feet from the nearest dwelling that is not on the same property as the outdoor wood boiler	10' above ground level if there are no abutting residences within 300' 2' higher than the structure being served by the unit if an abutting residence is within 300'	Phase I units certified to meet a PM standard of 0.60 lb/MMBtu on a heat input basis	Phase I units must be located at least 100' from the nearest property line	Stack must extend 2' higher than the peak of the roof of a residence or place of business not served by the unit if located within 300' of the unit	Phase I units certified to meet a PM standard of 0.44 lb/MMBtu on a heat input basis	Phase I units must be located more than 200' from any residence, school, or health care facility that is neither served by the unit nor owned by the owner or lessee of the unit	None	Residential-size unit (heat output of 250,000 Btu/hr or less) commencing operation on or after 4/15/2011 must meet a PM standard of 0.32 lb/MMBtu on a heat output basis	Units must be located no less than 100' from the nearest property boundary line	Stack must be 18' above ground level or 2' above the peak of any roof structure within 150' of the unit when necessary to adequately disperse smoke	Residential Hydronic Heaters manufactured, imported, or sold on or after 5/15/2020 must be certified to meet a PM standard of either 0.10 or 0.15 lb/MMBtu on a heat output basis depending on the test method used	The federal regulations contain no specific minimum stack height or property set-back requirements, only that the owner's manuals contain guidance on proper installation information, including stack height, heater location and achieving proper draft.
Phase II units certified to meet a PM standard of 0.32 lb/MMBtu on a heat output basis installed after 4/1/2010	At least 50 feet from the nearest property line or at least 70 feet from the nearest dwelling that is not on the same property as the outdoor wood boiler	10' above ground level if there are no abutting residences within 300' 2' higher than the structure being served by the unit if an abutting residence is within 300'	Phase II units certified to meet a PM standard of 0.32 lb/MMBtu on a heat output basis	Phase II units must be located at least 50' from the nearest property line	None	Phase II units certified to meet a PM standard of 0.32 lb/MMBtu on a heat output basis	Phase II units must be located more than 200' from any residence, school, or health care facility that is neither served by the unit nor owned by the owner or lessee of the unit	None	Commercial-size unit (heat output of greater than 250,000 Btu/hr) commencing operation on or after 4/15/2011 must meet a PM standard of 0.32 lb/MMBtu on a heat output basis	Units must be located no less than 200' from the nearest property boundary line, no less than 300' from a property boundary line of a residentially zoned property, and no less than 1,000' from a school	Stack must be 18' above ground level or 2' above the peak of any roof structure within 150' of the unit when necessary to adequately disperse smoke	Small residential forced-air furnaces manufactured or sold on or after 5/16/2016, but prior to 5/15/2020 must be certified to meet a PM standard of 0.93 lb/MMBtu on a heat output basis	The federal regulations contain no specific minimum stack height or property set-back requirements, only that the owner's manuals contain guidance on proper installation information, including stack height, heater location and achieving proper draft.
Units certified to meet a PM standard of 0.06 lb/MMBtu on a heat output basis (this is a voluntary, technology-forcing standard)	At least 20 feet from the nearest property line or at least 40 feet from the nearest dwelling that is not on the same property as the or outdoor pellet boiler; or No set-back requirements apply if the stack height requirements described in Section 3(C)(3) of Chapter 150 and indicated to the right are met	If the unit does not meet the stack height requirements below, the set-back requirements must be met 10' above ground level if there are no abutting residences within 100' 2' higher than the structure being served by the unit if an abutting residence is within 100'				Units certified to meet federal PM emission standards contained in 40 CFR Part 60, Subpart QQQQ	Federally certified units must be located more than 200' from any residence, school, or health care facility that is neither served by the unit nor owned by the owner or lessee of the unit	None				Large residential forced-air furnaces manufactured or sold on or after 5/15/2017, but prior to 5/15/2020 must be certified to meet a PM standard of 0.93 lb/MMBtu on a heat output basis	The federal regulations contain no specific minimum stack height or property set-back requirements, only that the owner's manuals contain guidance on proper installation information, including stack height, heater location and achieving proper draft.
												Small and Large residential forced-air furnaces manufactured or sold on or after 5/15/2020 must be certified to meet a PM standard of 0.15 lb/MMBtu on a heat output basis	The federal regulations contain no specific minimum stack height or property set-back requirements, only that the owner's manuals contain guidance on proper installation information, including stack height, heater location and achieving proper draft.