

Summary of Proposed Requirements for New Wood-fired Hydronic Heaters and Forced-Air Furnaces

On Jan. 3, 2014, the U.S. Environmental Protection Agency (EPA) proposed updates to its air emissions standards for residential wood heaters that would strengthen the requirements for new woodstoves, along with establishing the first standards for several other types of wood new heaters, including new hydronic heaters and forced air furnaces. The proposal would phase in emission limits over a five-year period, beginning in 2015. The proposed standards would apply only to new wood heaters and will not affect wood heaters already in use in homes or currently for sale today.

PROPOSED REQUIREMENTS FOR HYDRONIC HEATERS

- Hydronic heaters (also called wood heaters or wood boilers) are usually located outside the buildings they heat, in small sheds with short smokestacks. These units typically burn wood to heat liquid (water or a combination of water and antifreeze) that is circulated through pipes to provide heat and hot water to homes. They also can be used to heat workshops, barns and greenhouses. Hydronic heaters sometimes are located indoors, and sometimes they use other biomass as fuel (such as corn or wood pellets).
- Hydronic heaters currently are not subject to EPA rules. Use of these heaters has increased in some areas of the country in recent years, leading to concerns about the health effects of the smoke they produce. In 2007, EPA launched a voluntary program to encourage manufacturers to make hydronic heaters cleaner.
- Through the voluntary Hydronic Heater Program, some manufacturers have redesigned their models, making units available to consumers that are 90 percent cleaner than unqualified models. More than 40 hydronic heater models currently meet EPA's qualification requirements under the voluntary program.
- EPA is proposing to build on the voluntary program to ensure that all new wood-fired hydronic heaters are cleaner in the future. EPA's proposed updates would limit the amount of particle pollution, also known as particulate matter (PM), from newly manufactured hydronic heaters and forced air furnaces. The proposed limits also are expected to reduce emissions of other pollutants found in wood smoke.
- Today's proposed rule would establish PM emissions limits for these heaters in two steps:

- In Step 1, the PM emissions limit for all new hydronic heaters would be identical to the current qualifying level for EPA’s voluntary Hydronic Heater Program. More than 40 hydronic heater models already meet this limit.
- In Step 2, hydronic heaters would have to meet stronger emissions limits (see table below).

Proposed Emissions Limits and Compliance Deadlines for Hydronic Heaters		
Step	Proposed PM Limit	Compliance Date
Step 1	0.32 pounds per million Btu heat output, with a cap of 7.5 grams per hour for individual test runs	60 days after final rule is published in the Federal Register
Step 2	0.06 pounds per million Btu heat output	5 years after the effective date of the final rule.

- EPA also is seeking comment on phasing in the limits in three steps over an eight-year period. This approach would include an interim emissions limit of 0.15 pounds per million Btu heat output three years after the rule is published in the Federal Register.
- Under today’s proposal, new wood-fired hydronic heaters sold in the United States would be required to have a permanent label indicating they are EPA-certified to meet emission limits in the proposed rule. This label will signal to consumers that the heater meets EPA standards.
- The proposed rule would not apply to hydronic heaters that are fueled solely by gas, oil or coal.

Forced Air Furnaces

- Forced air furnaces, like hydronic heaters, burn wood to heat homes. However, heat from these furnaces, which typically are located indoors, is distributed using a blower. Forced air furnaces are not currently covered by EPA regulations. Today’s proposed rule would establish PM emissions limits for new forced air furnaces in two steps over a five-year period:

Proposed Emissions Limits and Compliance Deadlines for Forced Air Furnaces		
Step	Proposed PM Emissions Limit	Compliance Date
Step 1	0.93 pounds per million Btu heat output, with a cap of 18	60 days after final rule is published in the Federal

	grams per hour for individual test runs	Register.
Step 2	0.06 pounds per million Btu heat output	5 years after effective date of the final rule.

- EPA also is seeking comment on phasing in the limits in three steps over an eight-year period. This approach would include an interim emissions limit of 0.15 pounds per million Btu heat output three years after the rule is published in the Federal Register (the same interim limit as for hydronic heaters).

DETERMINING COMPLIANCE

- Each hydronic heater model line subject to the proposed rules would be required to demonstrate compliance through performance testing, similar to requirements of the current wood stove regulations. Under this certification program, one representative appliance is tested by an accredited laboratory to demonstrate compliance for an entire model line, which could consist of hundreds or thousands of units over the life of the model line. EPA is proposing this approach rather than requiring manufacturers to test every heater to minimize testing costs to manufacturers, most of which are small businesses.
- EPA also is proposing changes to the test method that would be used to demonstrate compliance with the proposed emissions limits. The changes would improve the precision of the results and more accurately reflect real world conditions. The agency is seeking comment on which test methods would be most appropriate and what other test method improvements should be considered.
- To strengthen compliance assurance and consumer confidence, the proposed standards would require testing and certification by internationally accredited laboratories and certification bodies. EPA would also review the tests and make the results available to the public on a website.

For additional information

- For additional information about today's proposal, including instructions on submitting comments, see <http://go.usa.gov/Zp6B>.