Voluntary Programs

Hearth, Patio & Barbecue Expo℠

HPBA Hearth, Patio & Barbecue Association

PHASE 2 QUALIFIED

U.S. Environmental Protection Agency
2008 Hydronic Heater Program

Phase 2 Qualified models are cleaner and pollute less than those models that have not met this emission level. Exposure to smoke has been associated with respiratory illness and other health problems. Models that have lower smoke emissions may reduce your risk.

For more information go to www.epa.gov/woodheaters

HYDRONIC HEATERS SMOKE EMISSIONS RANGE

Lower Emissions 0 — Higher Emissions 2.0

Better — Worse

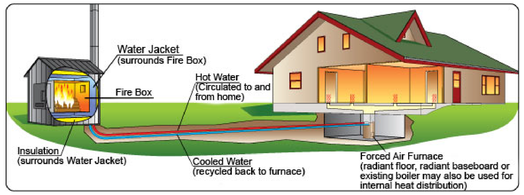
0.32 EPA PHASE 2 EMISSIONS LEVEL

0.26 THIS MODEL

Heaters with lower emissions produce less smoke when installed and operated properly.

MANUFACTURER:	XXXX
MODEL NUMBER:	XXXXX
8-HOUR OUTPUT RATING:	112,000 BTU/HR
8-HOUR AVERAGE EFFICIENCY:	70% (using higher heating value) 81% (using lower heating value)
FINE PARTICLE EMISSIONS:	6.1 GRAMS/HR (average) 17.4 GRAMS/HR (maximum test run) 0.17 LBS/MILLION BTU INPUT 0.26 LBS/MILLION BTU OUTPUT 0.09 GRAMS/HR/10,000 BTU OUTPUT

EPA has determined, based on testing by an accredited independent laboratory, that this model qualifies at the Phase 2 emissions level for U.S. EPA's Voluntary Program.



Breathe Easier ★ epa.gov/woodheaters

EPA's Phase 2 Voluntary Partnership Program: Outdoor Wood-Fired Heaters

EPA and manufacturers of outdoor wood-fired heaters are joining forces to make heaters available that are dramatically cleaner – about 90 percent – than units not qualified under the voluntary partnership program. These heaters will display EPA's white hang tag which means they are among the cleanest units on the market.

Wood Heaters and Smoke

Outdoor wood-fired heaters, also called outdoor wood boilers or hydronic heaters, burn wood to heat water, which is piped underground to provide heat for homes and other buildings. Use of these heaters has increased in recent years, prompting complaints about smoke and the health effects of the particle pollution it contains.

Cleaner Heaters through Partnerships

In January 2007, EPA launched a voluntary program to reduce outdoor wood heater emissions. Under the first phase of the program, participating manufacturers made units that are 70 percent cleaner than pre-program models. These models meet a smoke emissions level of 0.60 pounds per million Btu heat input.

Also in January 2007, the Northeastern States for Coordinated Air Use Management (NESCAUM) issued a model regulation that state and local governments can tailor to address their specific situations. A number of states, including Vermont, Maine, Connecticut and New Hampshire, have adopted rules.

Phase 2 heaters, available beginning in late 2008, are even cleaner than the Phase 1 models. Qualified Phase 2 units must meet smoke emission levels of 0.32 pounds per million Btu heat output. That's 90 percent cleaner than pre-program models. Indoor hydronic heaters and units fueled by other biomass, such as wood pellets, sawdust and corn, also may qualify as Phase 2 models. Coal, oil and gas heaters are not included.

Replacing a pre-program wood heater with a more efficient EPA-qualified unit can significantly reduce pollution in your community.

Models qualified under EPA's Voluntary Program

Phase 1: 15 qualified models are 70% cleaner than unqualified models. Phase 1 models display an orange hang tag.

Phase 2: 6 qualified models are 90% cleaner than unqualified models. Phase 2 models display a white hang tag.

What is a Hydronic Heater?

Hydronic heaters can also be called outdoor wood boilers or outdoor wood furnaces. These heaters typically use wood to heat water that is piped to a nearby building (usually a home), providing both heat and hot water to the structure. An outdoor hydronic heater resembles a small shed with a short smokestack and is usually located outside of the building to be heated. Hydronic heaters may use other biomass as fuel. Some may be located indoors in furnace rooms. For purposes of EPA's voluntary program oil, coal or gas heaters are not included.

How do I know which units are cleaner? How much cleaner are they?

Units that have a white hang tag meet EPA's Phase 2 emission levels and are 90 percent cleaner than unqualified units.
Units that have an orange hang tag meet EPA's Phase 1 emission levels and are 70 percent cleaner than unqualified units.

What are the health effects of smoke from hydronic heaters?

Numerous scientific studies report potentially serious adverse health effects from breathing smoke emitted by residential wood combustion. Smoke contains both fine particle pollution ($PM_{2.5}$) and a number of air toxics. Fine particle pollution is linked to a variety of health problems, including aggravated asthma, reduced lung function, development of chronic bronchitis, irregular heartbeat, and premature death in people with heart and lung disease.

Should I replace my old outdoor wood boiler or hydronic heater?

If you have an old wood heater, consider replacing it with a cleaner heating device that qualifies for the EPA white hang tag.

Does it matter what people burn in hydronic heaters?

Yes! Use of the wrong fuels in a hydronic heater can decrease the efficiency of your heater and can increase pollution. If you have a hydronic heater, only use fuels recommended by the manufacturer.

Where can I find additional information on hydronic heaters?

Check www.epa.gov/woodheaters for updates on qualified models. For further information contact Gil Wood, wood.gil@epa.gov, 919-541-5272.

For more information about hydronic heaters, go to www.epa.gov/woodheaters

EPA-QUALIFIED WOOD-BURNING FIREPLACE PROGRAM

Partnership Agreement
between the
Office of Air Quality Planning and Standards,
U.S. Environmental Protection Agency
and

_____

(Revised July 4, 2009)

Purpose

This Partnership Agreement (Agreement) is a voluntary commitment between _____ (Partner) and the Office of Air Quality Planning and Standards (OAQPS), United States Environmental Protection Agency (EPA), by which Partner agrees to participate in the EPA-Qualified Wood-burning Fireplace Program. The primary purpose of the Program is to promote the manufacture and sale of cleaner wood-burning fireplaces over other wood-burning fireplace models, unless prohibited by law or by regulation. EPA is not promoting the sale of wood-burning fireplaces over other devices.

This Agreement sets out the commitments Partner agrees to make as part of its participation in this voluntary program. It does not impose any legally binding obligations on EPA, nor is EPA imposing any legally binding obligations on Partner through this Agreement.

Background

Fireplaces are widely used in the United States, particularly in new construction. They provide home builders with an option for homeowners to enjoy the hearth experience. Some fireplaces are equipped with gas log sets, so that they can burn natural gas or propane. However, the vast majority of the fireplaces that are sold are intended to burn cord wood. This Program was undertaken to encourage the development and sale of a new generation of lower-emitting fireplaces that burn cord wood. The original version of this the Partnership Agreement was dated February 19, 2009 and pertained to low-mass fireplaces. The version of July 4, 2009 expands the program to other fireplaces, e.g., masonry fireplaces. By encouraging manufacturers to offer new, cleaner wood-burning fireplace models for sale, this voluntary program is expected to reduce air

Did you know?

Despite the hundreds of thousands of dollars and thousands of hours spent by HPBA and the industry on working with EPA to create partnership programs encouraging the development and use of cleaner burning products (hydronic heaters and low mass fireplaces), these programs may be prematurely terminated by another EPA effort, the revised NSPS (New Source Performance Standards).

PHASE 1 QUALIFIED

U.S. Environmental Protection Agency
Wood-burning Fireplace Program

Phase 1 Qualified models are cleaner and pollute less than those models that have not met this emissions level. Exposure to smoke has been associated with respiratory illness and other health problems. Models that have lower smoke emissions may reduce your risk.

For more information go to www.epa.gov/fireplaces

FIREPLACE SMOKE EMISSIONS RANGE

Lower Emissions 0 — Higher Emissions 12.0

Better — Worse

7.0 7.3 EPA PHASE 1 EMISSIONS LEVEL

THIS MODEL

Fireplaces with lower emissions produce less smoke when installed and operated properly.

MANUFACTURER:	XXXXX
MODEL NO:	XXXXX
PARTICLE EMISSIONS:	7.0 GRAMS/KG OF WOOD BURNED

* EPA has determined, based on testing by an accredited independent laboratory and a certification of conformity by a nationally recognized certification body, that this model qualifies at the Phase 1 emissions level for U.S. EPA's Voluntary Fireplace Program.

EPA Wood-Burning Fireplace Program

- An HPBA / EPA voluntary partnership program to provide a clean-burning fireplace option for areas of the country that regulate fireplaces.
- Brings cleaner-burning units to the consumer, reducing the need for bans or regulations to eliminate fireplace products altogether.
- A voluntary program is easier and more effective than a required fireplace certification program which may be considered in the upcoming revision of the NSPS.

List of Cleaner Fireplaces

Phase 2 White Tag Models

Manufacturer	Model Name & Number	Type	Emission Rate	Fuel Type
Industrial Chimney Company, Inc.	Renaissance Rumford 1000 CD	Low mass	0.94 grams/kg*	Stick Wood
Earthcore Industries, LLC	Standard Series 36C	Masonry	2.93 grams/kg*	Stick Wood
Industrial Chimney Company, Inc.	Renaissance Rumford 1000	Low mass	3.0 grams/kg*	Stick Wood
Industrial Chimney Company, Inc.	Renaissance Rumford 1000 H	Low mass	3.4 grams/kg*	Stick Wood
Lennox Hearth Products	Solana	Low mass	3.9 grams/kg*	Stick Wood
Security Chimneys International	HE43-2	Low mass	3.9 grams/kg*	Stick Wood