

Outdoor Hydronic Heaters Meeting Emission Standards for the Fairbanks North Star Borough PM2.5 Nonattainment Area

These standards only apply to heating devices being **sold or installed** in the FNSB PM2.5 Nonattainment Area beginning **February 28, 2015**. Only wood-fired hydronic heaters that appear on this list and meet the emission standards may be sold or installed inside the nonattainment area beginning February 28, 2015.

DEC Standards (INSIDE FNSB PM2.5 NONATTAINMENT AREA ONLY) – 18 AAC 50.077			
Wood-Fired Heating Device Type	Particulate Matter Emission Standard		Effective Date
Hydronic Heaters <350,000 Btu/hr	EPA Phase 2 Voluntary Partnership Program “White Tag” <u>AND</u> 2.5 g/hr particulate matter annual average emission level	<u>OR</u> 0.32 lbs/MMBtu average annual emission level <u>AND</u> 2.5 g/hr particulate matter annual average emission level <u>AND</u> 18.0 g/hr individual test run cap	02/28/15

More information and a map of the FNSB PM2.5 Nonattainment area is available online at:
<http://burnwise.alaska.gov/requirements>

NEW: A summary of changes made to this month’s list can be found at the end of the document.

Manufacturer Name	Model Name	Annual Avg Emission Level (lbs/million BTU)	Annual Avg Emission Rate (grams/hr)	EPA Phase 2 Qualified	Individual Test Run Max (grams/hr)	Max Heat Output Rating (BTU/hr)	Fuel Type
SteelTech	G100	0.07	1	Yes	<18.0	125,000	stick wood; batch load
SteelTech	G200-2	0.07	1.7	Yes	<18.0	232,000	cord wood
Central Boiler	Maxim M255P/M255PE	0.04	0.8	Yes	<18.0	165,215	Wood pellets
GARN	WHS-2000H & WHS-2000V	0.07	1.69	Yes	<18.0	200,000	Cord wood; batch load
Greentech Manufacturing Inc.	Crown Royal RS7200E	0.13	2.46	Yes	<18.0	184,508	Cord Wood
Polar Furnace	G3	0.08	1.96	Yes	<18.0	200,645	stick wood; batch load
Hawken Energy	GX-10	0.14	2.2	Yes	<18.0	144,870	stick wood; batch load



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Mahoning Outdoor Furnace	Sky Series V	0.18	2.4	Yes	<18.0	110,000	stick wood; batch load
Maine Energy Systems, LLC	PE/PES 12-20	0.07	0.7	Yes	<18.0	67,694	Wood pellets
Maine Energy Systems, LLC	PES 25-32	0.06	0.8	Yes	<18.0	99,797	Wood pellets
Maine Energy Systems, LLC	PE/PES 36-56	0.07	1.7	Yes	<18.0	199,408	Wood pellets
Northwest Mfg., Inc.	Mini Boiler	0.11	1.4	Yes	<18.0	101,577	Wood pellets
Northwest Mfg., Inc.	CleanFire 400	0.07	1.04	Yes	<18.0	102,408	Cord Wood
Northwest Mfg., Inc.	Ultra 30	0.09	1.6	Yes	<18.0	102,716	Wood pellets
NBE Production	Kedel RTB54	0.08	0.68	Yes	<18.0	60,000	Wood pellets
NBE Production	Kedel RTB102	0.07	0.87	Yes	<18.0	87,379	Wood pellets
NBE Production	Kedel RTB170	0.08	1.76	Yes	<18.0	162,000	Wood pellets

Source: <http://www.epa.gov/burnwise/owhlist.html> (accessed October 17, 2016)

This list will be updated regularly.

If a wood-fired hydronic heating device <350,000 Btu/hr meets the emission standards in 18 AAC 50.077 but does not appear on this list, submit proof of compliance with the standards to DEC for review and approval.

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Summary of Changes:

Change Type	Manufacturer	Models	Reason for Change
Removed	Aqua-Therm	Kunzel PK-10	Removed From EPA List



Removed	Aqua-Therm	Kunzel PK-20	Removed From EPA List
Removed	Northwest Mfg., Inc.	Flex-Fuel 30 KW indoor/outdoor	Removed From EPA List
Removed	Northwest Mfg., Inc.	Flex-Fuel 60 KW indoor/outdoor	Removed From EPA List
Removed	Northwest Mfg., Inc.	AFS 900	Removed From EPA List
Removed	Central Boiler	Maxim M250	Removed From EPA List
Removed	GARN	WHS-1500H & WHS-1500V	Removed From EPA List
Removed	LEI Products	MBB-100	Removed From EPA List
Removed	Pro-Fab Industries	Empyre Elite 100 & Empyre Elite XT100	Removed From EPA List
Removed	Northland Dist. & Mfg., Inc.	Pristine Series 1000	Removed From EPA List
Added	Northwest Mfg., Inc.	CleanFire 400	New To EPA List
Added	Greentech Manufacturing Inc.	Crown Royal RS7200E	New To EPA List

