

Woodstoves Meeting Emission Standards for the Fairbanks North Star Borough PM2.5 Nonattainment Area

These standards only apply to **NEW** heating devices being **sold or installed** in the FNSB PM2.5 Nonattainment Area. Only **NEW** woodstoves that appear on this list and meet the emission standards may be sold or installed inside the nonattainment area. For woodstoves currently installed at a location, please refer to the following link to see if they need to be removed or if they may stay during a real estate transaction: <http://dec.alaska.gov/air/anpms/communities/fbks-pm2-5-real-estate/#lists>.

If a wood-fired heating device <350,000 Btu/hr meets the emission standards in 18 AAC 50.077 but does not appear on this list, contact DEC staff for guidance. In addition, if it appears a device has been listed incorrectly, contact Cory McDonald by phone (907) 451-5172 or by email cory.mcdonald@alaska.gov.

DEC develops these lists by reviewing devices that have received EPA certification and where DEC has received a request by their manufacturer to review the underlying certification test report. DEC applies the standards found in 18 AAC 50.077.

Table 1. DEC Standards (INSIDE FNSB PM2.5 NONATTAINMENT AREA ONLY) – 18 AAC 50.077

Wood-Fired Heating Device Type	Particulate Matter Emission Standard	Effective Date
Woodstoves & Pellet Stoves <350,000 Btu/hr	EPA Certification <u>AND</u> 2.0 g/hr particulate matter annual average emission level <u>AND</u> <u>Not exceed 6.0 grams per hour on any valid 1-hr filter pull from the device's certification test</u> <u>AND</u> <u>DEC acceptance of underlying certification test results</u>	1/8/2020 9/1/2020

[More information and a map of the FNSB PM2.5 Nonattainment Area](#) is available online



Table 2. Summary of Changes:

Change Type	Manufacturer	Models	Reason for Change
Addition	Hearthstone Quality Home Heating Products Inc.	Green Mountain 80-1 (8681), Okemo (8380), Hipster 30 (8280)	Review
Provisional Addition	Travis Industries, Inc.	Liberty NexGen-Hybrid	Review

As of February 1, 2022, all devices have been removed if DEC has not accepted or has insufficient data to make a determination based on review of the underlying certification test results as required under 18 AAC 50.077(c)(2). This is in addition to the removal of devices that do not meet the DEC standards summarized in the table above.

Highlighted devices (**in yellow**) are those devices that are due to be removed ≤ 6 months from now at the expiration of their milestone date (see transition list for more detail) if their report issues are not resolved by that time.

Devices with an (*) next to their model name are approved provisionally until their certification expires or is renewed.

18 AAC 50.077(C)(3)(ii) states that alternative test methods (ATM), including broadly applicable test methods may be used in meeting the state standards if approved by both EPA and DEC. DEC continues to allow devices on the approved list that have been tested with alternative methods unless the device's certification test report review indicates report issues. At this time ATMs may continue to be used until such time as either EPA or DEC formally disapproves their use.



Table 3. Approved Device List

Manufacturer Name	Model Name	Annual Avg Emission Rate (g/hr)	Firebox Volume (cubic feet)	Heat Output (BTU/hr)
Blaze King Industries, Inc.	Princess PE32	0.55	2.86	11358-34435
Energy Distribution	Gaya Ardoise, Itaya, Onyx, Gaya Feuille, Symphonia, Antaya, Theia, Akan	1.9	2.31	33282-36774
Hearthstone Quality Home Heating Products Inc.	(*) Green Mountain 40 (8640), Craftsbury 2 (8392), Hipster 14 (AMB8240)	1.1	1.32	13876-31581
Hearthstone Quality Home Heating Products Inc.	(*) Green Mountain 60 (8660), Hipster 20 (AMB8260), Shelburne (8372)	0.6	2.03	12608-33576
Hearthstone Quality Home Heating Products Inc.	(*) Green Mountain 80 (8680)	0.67	3.16	15069-33396
Hearthstone Quality Home Heating Products Inc.	Green Mountain 80-1 (8681), Okemo (8380), Hipster 30 (8280)	0.53	3.16	14846-33424
Hearthstone Quality Home Heating Products Inc.	(*) Manchester (8362)	0.65	2.45	14111-33038
Hearthstone Quality Home Heating Products Inc.	Lincoln (8060)	1.1	1.00	14545-20507
Hearthstone Quality Home Heating Products Inc.	Castleton (8031)	0.98	1.9	12501-24540
Hearth and Home Technologies	Quadra-Fire 21M-ACC-C, Discovery-1-C, FF-WP-100	1.7	1.48	13585-29322
Jotul U.S.A., Inc.	(*) F445	0.49	2.03	13212-35722
Kuma Stove And Iron Works	(*) K-181 Series: Aspen LE-1, Tamarack LE-1, Aberdeen LE-1, and Alpine LE-1	1.1	1.82	12764-29153
RSF / Industrial Chimney Company, Inc.	(*) Opel+ Keystone-AK	0.7	2.32	11723-27034
Travis Industries, Inc.	(*) Evergreen NexGen-Hybrid Free-Standing, Evergreen NexGen-Hybrid Insert	1.2	2.180	10768-31641
Travis Industries, Inc.	(*) Rockport NexGen-Hybrid	0.73	2.04	12594-42722



Manufacturer Name	Model Name	Annual Avg Emission Rate (g/hr)	Firebox Volume (cubic feet)	Heat Output (BTU/hr)
Travis Industries, Inc.	(*) Liberty NexGen-Hybrid	0.9	4.14	11598-47138
Travis Industries, Inc.	44 Elite NexGen-Hybrid	1.1	4.2	12016-54510
Travis Industries, Inc.	36 Elite NexGen-Hybrid	0.6	3.14	10733-47514
Travis Industries, Inc.	Medium Flush Wood NexGen-Hybrid	1.2	2.23	11076-39456
United States Stove Company	TH-100, US500E, AW520E, VG520, SW500, CH500, KW500, CGWS750	1.7	0.59	10652-26028

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