## Myren Consulting, Inc.

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DATE: April 1, 2014

RE: COMPARISON OF MYREN CONSULTING, INC. EPA TEST REPORT WEIGHTED AVERAGES WITH EPA CERTIFICATION VALUES

Since Myren Consulting, Inc. was first accredited by EPA as a Wood Heater Testing Laboratory in 1996, we have submitted a total of 43 woodstove certification test reports to EPA. All of these reports were accepted and the stoves were certified by EPA. The following table lists each stove, the weighted average PM emission rate shown in the test report submitted to EPA by Myren Consulting, Inc. and the weighted average PM emission rate for that stove on EPA's certified stove list.

Manufacturer/Stove		MCI	<u>EPA</u>
Avalon by Travis	s Industries Avalon Cottage	2.99	2.9
BBQ Galore	Rosewood	2.66	2.7
Consuming Fire	Perfect Hearth	3.41	3.4
Eureka	Emerald	4.44	4.4
Fireplace Products International F2100ML		3.97	3.9
Heating Energy S	Systems 1707/1700	4.58	4.6
High Valley	1600	2.78	2.7
Kent I	Pearl Bay	3.95	3.8
Kozy Heat	342	3.34	3.3
	Aspen Ashwood	4.10 3.50	4.1 3.3 <sup>1</sup>

Wood Classic HT-2	3.28	3.2
Scott HT-1	3.50	3.5
Tamarack (KTAM)	4.42	4.42

NOTE 1. The PM weighted average emissions values shown on EPA's list for the Kuma Ashwood is not correct. It should be 3.5. A substantial effort has been made to correct this error, but thus far the effort has unsuccessful.

Monessen	Savannah SSW 30	2.48	2.5
	Savannah SSI 30	3.47	3.47
	Savannah SSW 20	3.76	3.76
Navigator	NSW-1 (Sardine)	3.55	3.5
	NSw-2 (Little Cod)	3.68	3.6
Newmac	Status	4.75	4.97 <sup>2</sup>
	Classic I	4.13	4.0
	Classic II	3.04	3.04
	WAF-70	2.71	2.72

NOTE 2: There was no communication from EPA as to why EPA increased the weighted average.

Osburn	1100	5.75	5.7
	2200 Bay/ 2000	2.74	2.7
	2200 Bay/ 2200	5.81	5.7
	1800	2.81	2.8
Pacific Energy	NEO 1.6	3.92	3.9
	FP-30	2.68	2.68
	Summit	3.57	3.6
	Summit Model B	3.90	Not listed <sup>3</sup>
	True North	4.12	4.1
	NEO 2.5	2.85	Pending

NOTE 3: The Summit Series B is not listed as a separate certified model line, even though it should be. Instead, it is included in with the Summit Series A with a weighted average of 3.6 g/h.

Thelin T-4000 3.62 3.6

Travis	Lopi Sheffield	3.96	3.9
Vogelzang	TR-009B	3.73	3.73
	TR-009	3.89	3.89
	TR-006 (The Durango)	3.60	3.6
	TR-007/011 (The Ponderosa)	3.20	3.2
	TR-004 (The Colonial)	4.02	4.02
	TR-001 (The Defender)	4.22	4.184
	TR-002 (The Shiloh)	4.22	$\boldsymbol{?}^4$
	TR-003 (The Highlander)	4.22	$\boldsymbol{?^4}$

NOTE 4: Myren Consulting retested the TR-001, TR-002 and TR-003 Model line in 2009 and submitted a test report to EPA with a weighted average of 4.22 g/h for the test unit, the Defender, Model # TR-001B. (EPA Certificate # 781 dated 5/3/2010) At the time the report was submitted, Vogelzang also requested reciprocal certification for the Shiloh, Model # TR-002B and the Highlander, Model # TR-The Defender is on EPA's list at 4.18 g/h, but has 003B. no model line designation. No mention is made on the list of either the Shiloh, Model # TR-002B or the Highlander, Model # TR-003B. However, elsewhere on the list under Vogelzang, the Highlander, Shiloh insert TR003 are listed at 3.8 g/h. This may be the certification value for the original certified model line, the TR001, TR002 and TR003. I do not know where that number came from. And there was no communication from EPA as to why the certification value for the TR-001B was decreased.

Waterford Stanley Ashling 4.14 4.1

Wolf Steel Napoleon Prestige NZ 26 5.41

## Signed:

Alben T. Myren Gr.

Alben T. Myren Jr.

President, Myren Consulting, Inc.

Date: April 1, 2014