



Vermont Department of Environmental Conservation

Air Quality and Climate Division
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(802) 828-1288

Agency of Natural Resources

October 4, 2016

Mr. Chuck Gagner
President
Northwest Manufacturing, Inc.
600 Polk Avenue SW
Red Lake Falls, MN 56750

SUBJECT: Phase II Certification of Northwest Manufacturing, Inc. WoodMaster Model CleanFire 400 Outdoor Wood Boiler under Section 5-204 of the Vermont Air Pollution Control Regulations

Dear Mr. Gagner:

The Vermont Air Quality & Climate Division (AQCD) has completed its review of the information Northwest Manufacturing, Inc. (Northwest) submitted to this office, including the April 26, 2016 test report (Project # 033_HHW-059-1) prepared by Dirigo Laboratories, Inc. (Dirigo) regarding the Model CleanFire 400 outdoor wood boiler (OWB). The test results indicate that the CleanFire 400 particulate matter emissions were 0.07 lbs/million BTUs of heat output (year-round weighted average), which is lower than Vermont's Phase II emission limit of 0.32 lbs/million BTUs of heat output. In addition, the test results indicate that the highest grams/hour emission rate for any individual test run was 3.6 which is lower than the 18 grams/hour maximum set by §5-204(e)(2)(ii) of the Air Pollution Control Regulations (APCR). The U.S. Environmental Protection Agency (EPA) has reviewed the Dirigo test report and has approved the CleanFire 400 for certification pursuant to the 2015 New Source Performance Standard (NSPS) for New Residential Hydronic Heaters and Forced-Air Furnaces at 40 CFR Part 60, Subpart QQQ. The test methods used by Dirigo are acceptable under APCR §5-204.

Thank you for providing this office with detailed engineering drawings and specifications for the CleanFire 400, as required by §5-204(e)(3)(i). We expect that all units designated as the CleanFire 400 will have the same specifications, within acceptable manufacturing tolerances, and that any components of these units that may affect emissions will be composed of the same materials as those in the tested unit. Please let me know immediately if this assumption is not accurate.

Based on the AQCD's and EPA's review of the information submitted by Northwest and the conditions noted above concerning specifications and materials, the AQCD has determined that the CleanFire 400 OWB complies with the Phase II emission limit in §5-204(e)(2)(ii) of the APCR and that all units with the CleanFire 400 model designation may be distributed or sold for use in Vermont on or after the date of your receipt of this letter. This certification shall expire five (5) years after the date of its issuance, unless revoked sooner pursuant to APCR §5-204(e)(4).

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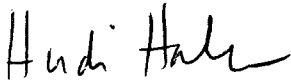
Mr. Chuck Gagner

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I would like to take this opportunity to remind you of a related obligation that Northwest has under APCR §5-204(e)(5), "Notification by Manufacturers". When an OWB model is certified, this subsection requires the manufacturer to give written notification, within 30 days of receiving the certification, to its dealers and others who sell or may be selling your OWBs for use in Vermont. This notice should list all the OWB models being sold by Northwest and specifically identify the Model CleanFire 400 as having been approved to be distributed or sold for use in Vermont. Please provide a copy of this written notice and a list of the addressees and their locations to this office when the mailing is completed.

Thank you for Northwest's interest in reducing the air contaminant emissions from OWBs. If you have any questions about this letter, please contact me or John Wakefield of my staff at (802) 828-1288.

Sincerely,



Heidi Hales, Director
Air Quality & Climate Division

cc: Lisa Rector, NESCAUM

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