



Vermont Department of Environmental Conservation
Air Pollution Control Division
103 South Main Street, 3 South
Waterbury, VT 05671-0402

Agency of Natural Resources

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December 6, 2012

Mr. Neil Hofer, General Manager
Polar Furnace Manufacturing, Inc.
Box 159
Sperling, MB R0G 2M0
Canada

SUBJECT: Phase II Certification of Polar Manufacturing Co., "Model G2" Outdoor Wood Boiler under Section 5-204 of the Vermont Air Pollution Control Regulations

Dear Mr. Hofer:

The Vermont Air Pollution Control Division (APCD) has completed its review of the information Polar Furnace Manufacturing, Inc. (Polar) submitted to this office, including the May 31, 2012 test report (No. 100733282MID-008) prepared by Intertek Testing Services NA Inc. (Intertek), the owner's manual, engineering drawings and specifications for the model G2 (aka G2-3) outdoor wood-fired boiler (OWB). The test results indicate that the model G2's particulate matter emissions were 0.19 lbs/million BTUs of heat output (year round weighted average), which is equivalent to or 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 6.06, which is lower than the 18 grams/hour maximum set by §5-204(e)(2)(ii) of the Air Pollution Control Regulations (APCR). USEPA has reviewed the Intertek test report and has approved the test methods and results. The test methods used by Intertek are also acceptable under APCR §5-204. Since USEPA has approved the test results and the testing was performed by an EPA accredited laboratory, the APCD is willing, for this particular test series, to waive the requirement in §5-204 regarding 30 days prior notice to the APCD of the testing.

Thank you for providing this office with detailed engineering drawings and specifications for the model G2, as required by §5-204(e)(3)(i). This information was included with the electronic information you submitted with your certification application and will be kept confidential, as requested. We will expect that all units designated with the model number G2 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 APCD's and USEPA's review of the information submitted by Polar, and the conditions noted above concerning specifications and materials, the APCD has determined that the model G2 OWB complies with the emission limit in APCR §5-204(e)(2)(ii) and that all units

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Mr. Neil Hofer, General Manager

Page 2 of 2

with the "G2" 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).

I would like to take this opportunity to remind you of a related obligation that Polar 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 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 Polar and specifically identify the model G2 (along with any other Vermont-certified models) 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 Polar's interest in reducing the air contaminant emissions from outdoor wood-fired boilers. If you have any questions about this letter, please contact me or Philip Etter of my staff at (802) 241-3840.

Sincerely,



Richard A. Valentinetti, Director
Air Pollution Control Division

cc: Amanda Aldridge, USEPA, OAQPS, RTP, NC
Lisa Rector, NESCAUM
File A8 – Polar Furnace Manufacturing Co.,