



**Vermont Department of Environmental Conservation**

Air Pollution Control Division  
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*Agency of Natural Resources*

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July 11, 2011

Mr. Martin Lunde, President  
Dectra Corporation  
3425 33<sup>rd</sup> Avenue, NE  
Saint Anthony, MN 55418

**SUBJECT:** Phase II Certification of Dectra Corporation's "Garn Model WHS1500" Outdoor Wood Boiler under §5-204 of the Vermont Air Pollution Control Regulations

Dear Mr. Lunde:

The Vermont Air Pollution Control Division (APCD) has completed its review of the information Dectra Corporation submitted to this office on May 6, 2011 and subsequent dates, including the June 23, 2011 test report (No. G100248857MID-006R) prepared by Intertek Test Laboratories, Inc. (Intertek), and engineering drawings and specifications for the model Garn WHS1500 OWB. The test results indicate that the model Garn WHS1500's particulate matter emissions were 0.13 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 10.5 which is lower than the 18 grams/hour maximum set by §5-204(e)(2)(ii) of the Air Pollution Control Regulations (APCR). The test was conducted according to ASTM E2618-09, Appendix X1, "Modified Test Method for Wood-fired Hydronic Appliances That Utilize Thermal Storage". The APCD has reviewed the Intertek test report and approves the test methods and results, specifically including the use of ASTM E2618-09, Appendix X1. The APCD's authority to accept the use of alternative emission test methods for the purpose of OWB certification is included in APCR §5-204(e)(3)(iv)(C). . Since the APCD 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 Garn WHS1500, as required by §5-204(e)(3)(i). This information was sent by mail and will be kept confidential, as requested. We will expect that all units designated with the model number Garn WHS1500 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.

(continued on next page)

Mr. Martin Lunde, President

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Based on the APCD's review of the information submitted by Dectra Corporation, and the conditions noted above concerning specifications and materials, the APCD has determined that the model Garn WHS1500 OWB complies with the emission limit in APCR §5-204(e)(2)(ii) and that all units with the "Garn WHS1500" 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 Dectra Corporation 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 Dectra Corporation and specifically identify the model Garn WHS1500 (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 Dectra Corporation'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 Chris Jones 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