

State of Vermont
Department of Environmental Conservation

Agency of Natural Resources

AIR POLLUTION CONTROL DIVISION
103 South Main Street, 3 South
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Tel: 802-241-3840
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September 9, 2008

Mr. Martin Lunde, President
Dectra Corporation
3425 33rd Avenue NE
St. Anthony, MN 55418

SUBJECT: Interim Certification of Garn Models "WHS 1350, WHS 1500, and WHS 2000"
Outdoor Wood Boilers under Section 5-205 of the Vermont Air Pollution Control
Regulations

Dear Mr. Lunde:

The Air Pollution Control Division (APCD) has completed its review of the information Dectra Corporation (Dectra) submitted to this office on May 31, 2006 and later dates, including the March 9, 2006 revised test report prepared by Intertek Testing Services NA, Inc. (Intertek), regarding the Garn model "WHS 1350" outdoor wood-fired boiler (OWB). The test results indicate that the WHS 1350's particulate matter emissions were 0.32 lbs/million BTUs of heat input (three run average), while burning oak cribs. The average emissions of the unit were lower than Vermont's emission limit of 0.44 lbs/million BTUs of heat input. This testing was performed in accordance with the "Proposed Test Protocol for Outdoor Boiler Efficiency and Emissions Research Testing" created by Intertek, which incorporates USEPA's Method 5-G3 sampling procedure.

The APCD has reviewed the Intertek test report and approves the test methods, for the purposes of your application, as an alternative method under §5-205(d)(3)(iii) of Vermont's Air Pollution Control Regulations (APCR). Under this provision, the Air Pollution Control Officer can approve alternative methods on a case-by-case basis. Since the testing was performed by an EPA accredited laboratory, the APCD is willing, for this particular test series, to waive the requirements in §5-205 regarding prior notice of the testing and submission of a test protocol to the APCD.

Thank you for providing this office with detailed engineering drawings and specifications for the Garn models WHS 1350, WHS 1500 and WHS 2000, as required by §5-205(d)(1). This information was received on August 29, 2008 and, together with the test data and related correspondence, comprises your application for certification of these models. We expect that all units in each model line will have the same specifications, within acceptable manufacturing tolerances, as indicated in your drawings and that any components of these units that may affect emissions will be composed of the same or similar materials as those in the tested unit. Please let me know immediately if this assumption is not accurate.

OVER



Based on the APCD's review of the information submitted by Dectra, and the conditions noted above concerning specifications and materials, the APCD has determined that the average emissions of the Garn model WHS 1350 comply with the emission limit in §5-205(e)(1) of the APCR. Moreover, the APCD has determined that the basic engineering design and mode of operation of the Garn models WHS 1350, WHS 1500 and WHS 2000, including especially the use of mass thermal storage, are essentially the same, such that the test results for the model WHS 1350 (expressed in terms of pounds per million BTUs of heat input) are representative of the emissions of all three models for the limited purposes of this letter.


Therefore, the APCD hereby grants **interim certification** to Dectra for the Garn models WHS 1350, WHS 1500 and WHS 2000. This interim certification will expire on **March 31, 2009**. All units within these three model lines are now allowed to be distributed or sold in Vermont or for installation in Vermont up until that date. The APCD encourages Dectra to retest all three model lines once the final ASTM mass thermal storage test protocol for OWBs (or a USEPA equivalent method) has been accepted and published. If Dectra demonstrates compliance by one or more of these model lines with Vermont's emission limit using the final mass thermal storage test protocol, the APCD should be able to grant full certification to the passing model line(s).

Please note that, if full certification is granted to one or more of the above model lines, it would expire five (5) years after the date of its issuance, unless the Vermont Agency of Natural Resources adopts a more stringent particulate matter emission limit for new OWBs that goes into effect prior to the expiration date of the certification(s). In that event, certification for any new boilers in such a model line or lines would be revoked, and Dectra would be required to demonstrate compliance with the new emission limit in order to be recertified.

I would like to take this opportunity to remind you of a related obligation Dectra has under APCR §5-205(e), "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 in Vermont or for installation in Vermont. This notice should list all the OWB models you sell and specifically identify the three models that have been approved for sale or installation in Vermont until March 31, 2009. Please provide a copy of this written notice and a list of the addressees and their locations to this office when your mailing is completed.

Thank you for your 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: Gilbert Wood, EPA/OID, RTP, NC
Lisa Rector, NESCAUM

Mr. Martin Lunde, President
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or specified by the manufacturer for installation both outdoors and indoors may not be sold for use in Vermont unless they have received Vermont certification, whether they are actually installed outdoors **or** indoors.

The APCD appreciates the efforts made by you and other OWB manufacturers to design and construct high quality boilers. I believe the future of the OWB industry depends on the production of clean burning and efficient heating devices that will have broad consumer and regulatory acceptance. If you have any questions about this letter, please contact Christian Jones (802-241-3851) or Philip Etter (802-241-3847) of my staff.

Sincerely,



Richard A. Valentinetti, Director
Air Pollution Control Division

Enclosure

cc: Gilbert Wood, EPA/OID, RTP, NC
Lisa Rector, NESCAUM