

State of Vermont  
Department of Environmental Conservation  
**AIR POLLUTION CONTROL DIVISION**  
103 South Main Street, 3 South  
Waterbury, VT 05671-0402

Agency of Natural Resources

Tel: 802-241-3840  
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April 14, 2010

Mr. Mark Setzer, President  
HeatSource 1, Inc.  
2201 Ridgeview Drive  
Beatrice, NE 68310

**SUBJECT:** Phase II Certification of HeatSource 1's Model "Earth Energy Series 190"  
Outdoor Wood Boiler under Section 5-204 of the Vermont Air Pollution Control  
Regulations

Dear Mr. Setzer:

The Vermont Air Pollution Control Division (APCD) has completed its review of the information HeatSource 1, Inc. submitted to this office, including the July 31, 2009 test report (No. 3182583MID-005) prepared by Intertek Testing Services NA Inc.(Intertek), regarding the model Earth Energy Series 190 outdoor wood-fired boiler (OWB). The test results indicate that the model Earth Energy Series 190's particulate matter emissions were 0.19 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 10.7, 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 prior notice to the APCD of the testing.

Thank you for providing this office with detailed engineering drawings and specifications for the model Earth Energy Series 190, as required by §5-204(e)(3)(i). This information was included with the CBI portions of the test data, both of which will be kept confidential, as requested in your *Application For Confidential Treatment Of Proprietary Information* received by e-mail on April 12, 2010. We will expect that all units designated with the model number Earth Energy Series 190 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 HeatSource 1 on March 26, 2010, and the conditions noted above concerning specifications and materials, the APCD has determined that the model Earth Energy Series 190 OWB complies with the Phase II

(continued)



Mr. Mark Setzer  
Page 2 of 2

emission limit in §5-204(e)(2)(ii) of the APCR and that all units with the "Earth Energy Series 190" 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 HeatSource 1 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 HeatSource 1 and specifically identify the model Earth Energy Series 190 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 HeatSource 1'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