

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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March 13, 2012

Mr. Warren Walborn, President Hawken Energy, Inc. P.O. Box 351 Shelby, MI 49455

SUBJECT:

Phase II Certification of Hawken Energy "Model GX10" Outdoor Wood Boiler

under Section 5-204 of the Vermont Air Pollution Control Regulations

Dear Mr. Walborn:

The Vermont Air Pollution Control Division (APCD) has completed its review of the information Hawken Energy, Inc. (Hawken) submitted to this office, including the February 2012 test report (No. 487-O-01-3, revised for model GX10) prepared by OMNI Test Laboratories, Inc. (OMNI), the owner's manual, and engineering drawings and specifications for the model GX10 OWB. The test results indicate that the model GX10's particulate matter emissions were 0.14 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 8.4, 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 OMNI test report and has approved the test methods and results. The test methods used by OMNI 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 GX10, as required by §5-204(e)(3)(i). This information was included on the disk you sent and with previous information you submitted and will be kept confidential, as requested. We will expect that all units designated with the model number GX10 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 Hawken, and the conditions noted above concerning specifications and materials, the APCD has determined that the model GX10 OWB complies with the emission limit in APCR §5-204(e)(2)(ii) and that all units with the "GX10" model designation may be distributed or sold for use in Vermont on or

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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 Hawken 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 Hawken and specifically identify the model GX10 (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 Hawken'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

File A8 – Hawken Energy, Inc.

Richard a. Valentinette