



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

March 8, 2023

Mr. Dale Horihan
General Manager
Lamppa Manufacturing, Inc.
9501 MN-135
Tower, Minnesota 55790

Re: Vapor Fire 100 (VF100) Model Cord Wood Forced-Air Furnace Certification Letter
Number 11FAF-17

Dear Mr. Lamppa:

The United States Environmental Protection Agency (EPA) has reviewed the October 24, 2022,¹ certification test report prepared by Intertek Testing Services NA, Inc. (Intertek), documenting the certification retest for the above-referenced forced-air furnace model. As a result of our review of the test report, including supporting documentation, EPA has determined that the test is a valid certification test demonstrating compliance with the applicable emission standard and conducted in accordance with the 2015 New Source Performance Standard (NSPS) for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces at 40 CFR Part 60, Subpart QQQQ (2015 NSPS). Therefore, EPA is reissuing Certificate of Compliance Number 11FAF-17 with the updated emissions rate, heat output range, overall heating efficiency, and carbon monoxide emission rate resulting from the certification retest as provided below. Certification under the 2015 NSPS is valid through March 8, 2028. However, as discussed below, our review of the test report identified a test method irregularity that occurred during the certification test but likely did not affect emissions. As a result, if you apply for renewal of this Certificate of Compliance prior to its expiration date, the application must include a certification test, and a waiver from such testing will not be granted. This letter serves as your forced-air furnace Certificate of Compliance. Please refer to the above-referenced Certificate of Compliance number in all future correspondence.

Based on the above-referenced test report and the information provided in your September 26,

¹ Revised on November 18, 2022, and December 13, 2022.

2022,² application, the above-referenced model is certified as meeting the 2015 NSPS. Under the 2015 NSPS and based on Intertek's February 2, 2023, Certification of Conformity, the model's emission rate of 0.10 lb/mmBtu meets the cordwood particulate matter emission limit of 0.15 lb/mmBtu (0.026 g/MJ) heat output per individual burn rate. The actual load heat output range and delivered efficiency for the above-referenced model are 21,465 – 33,691 BTU/hr and 76%, respectively. This model line's average carbon monoxide emission rate is 1.46 g/min.

This Certificate of Compliance is valid for the above-referenced model and cannot be transferred to another model without applying for another Certificate of Compliance. This Certificate of Compliance allows Lamppa to advertise and sell the above-referenced model through March 8, 2028. Thereafter, Lamppa may not advertise for sale, offer for sale, or sell forced-air furnaces under this Certificate of Compliance without applying for and obtaining another Certificate of Compliance.

All forced-air furnaces manufactured or sold under this Certificate of Compliance must comply with EPA labeling requirements found at § 60.5478. These provisions require each forced-air furnace to have a permanent label affixed to it, including the month and year of manufacture, model name or number, serial number, certification test emission value, test method, standard met, and compliance certification statement.

In addition, Lamppa must comply with all applicable requirements of the regulation, including:

1. Conducting a third-party certifier-approved quality assurance program that ensures that all units within a model line are similar to the forced-air furnace submitted for certification testing in all respects that would affect emissions and are in compliance with the applicable emission limit, pursuant to § 60.5475(m);
2. Applying for recertification whenever any change is made to the above-referenced model that affects or is presumed to affect the particulate matter emission rate for the model line, pursuant to § 60.5475(k)(1);
3. Placing a copy of the non-Confidential Business Information (non-CBI) certification test report and summary on the manufacturer's website. The test report and summary shall be available to the public within 30 days after the EPA issues a Certificate of Compliance pursuant to § 60.5475(b)(12);
4. Providing an owner's manual that includes the information listed in § 60.5478(f)(1) with each affected forced-air furnace model offered for sale;
5. Submitting a report to the EPA every two years following issuing a Certificate of Compliance for each model line. This report must include the sales for each model by state and certify that no changes in the design or manufacture of the model line have been made that require recertification pursuant to § 60.5475(k);

² Revised on March 1, 2023.

6. Retaining records and submitting reports as required at § 60.5479; and
7. Submitting forced-air furnaces for audit testing if selected by the EPA under §§ 60.5475(n)(1)(i) and (2)(i).

Failure to comply with these requirements may revoke this Certificate of Compliance and enforcement action, including penalties as specified under the Clean Air Act.

As stated above, the certification retest is a valid test demonstrating compliance with the emission limit of 0.15 lb/mmBtu for forced-air furnaces. The retest had sufficiently addressed the major deficiency³ identified in the original certification test upon which the above-referenced model was initially certified. However, our review of the certification test report identified a moderate deficiency in the retest. While not likely to affect emissions, this deficiency concerns an irregularity with how the retest was conducted pursuant to the October 7, 2022, EPA-approved Alternate Test Method (ATM)⁴ and the Canadian Standards Association (CSA) B415.1-10 *Performance Testing of Solid Fuel-Burning Heating Appliances Test Method*. Specifically, the retest did not meet the test fuel loading density requirements (10 lb/ft³) for certain test runs in accordance with CSA B415.1-10, § 8.3.4.⁵ Therefore, as a result of the irregularity with the retest, Lamppa will be required to conduct a new certification test if applying for renewal of this Certificate of Compliance prior to the expiration date of March 8, 2028, as provided by § 60.5475(i). This retest may be conducted at any time prior to the expiration date.

Pursuant to the October 7, 2022, ATM approval letter, you must also include the ATM letter in your certification test report for posting on your website.

To promote transparency in implementing the Wood Heater Program, we request manufacturers submit the Uniform Resource Locator (URL) or web address where the test report is posted to WoodHeaterReports@epa.gov within ten (10) days of posting the test report. Once EPA has verified that the full non-CBI certification test report has been posted on the manufacturer's website, the agency will add the above-referenced model to the EPA-Certified Wood Heater Database.

³ Invalid maximum heat output number for Category 3.

⁴ October 7, 2022, letter from Steffan Johnson, Group Leader, Measurement Technology Group, Office of Air Quality Planning and Standards, to Dale Horihan, General Manager, Lamppa Manufacturing, Inc.

⁵ While meeting the loading testing requirements for Category 4, the retest did not meet such requirements for Categories 1, 2, and 3.

If you have any questions concerning this letter, please contact the Wood Heater Program at WoodHeaterReports@epa.gov.

Sincerely,

Elizabeth Vizard
Acting Director
Monitoring, Assistance, and Media Programs Division
Office of Compliance
Office of Enforcement and Compliance Assurance