



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 28, 2023

MEMORANDUM

SUBJECT: Response to Office of Inspector General Final Report: “*The EPA’s Residential Wood Heater Program Does Not Provide Reasonable Assurance that Heaters Are Properly Tested and Certified Before Reaching Consumers.*” Report No. 23-E-0012, February 28, 2023

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Joseph Goffman
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TO: Sean W. O’Donnell
Inspector General

EPA’s Office of Enforcement and Compliance Assurance (OECA) and Office of Air and Radiation (OAR) appreciate the opportunity to provide you with a final response on the Office of Inspector General (OIG) report, “*The EPA’s Residential Wood Heater Program Does Not Provide Reasonable Assurance that Heaters Are Properly Tested and Certified Before Reaching Consumers.*” This final response reflects the beneficial collaboration between OECA, OAR, and OIG staff after the subject report was issued to identify the corrective actions that EPA will implement to resolve the report’s recommendations. We appreciate your staff’s assistance and have provided those corrective actions below.

EPA agrees with the OIG on the importance of an effective wood heater regulatory program for ensuring that wood heaters that are sold for home use are clean-burning and compliant with regulatory standards. We are committed to ensuring all wood heaters are in compliance with regulatory requirements that are intended to reduce health-harming pollution. As you know, EPA has already made significant progress in addressing the systemic problems that the OIG identified with wood heater certification testing, including:

- Rigorously re-reviewing all existing residential wood heater Certificates of Compliance and instituting a process for consistent reviews of test reports, notifying wood heater manufacturers of the need to correct test deficiencies, and proceeding with the Certificate of Compliance revocation process, when necessary.

- Notifying testing labs and third-party certifiers of the need to improve testing and reporting practices or risk having their EPA approval status revoked.
- Withdrawing test methods based on ASTM E3053 (ALT-125 and ALT-127) that were used to certify residential wood heaters after states raised concerns about them.
- Working to develop a new cord wood test method that is supported by sufficient data.
- Engaging regularly with our regulatory partners and other stakeholders on technical and policy issues to ensure that certification testing is conducted in a sufficient manner for determining compliance and for assisting state/local air programs to implement meaningful wood heater change-out programs.

While briefly alluding to some of these improvements, the OIG report concludes that EPA does not have an effective program for testing and certifying wood heaters. While EPA believes that this conclusion creates a mistaken impression of the current residential wood heater program given the comprehensive suite of actions that EPA has already undertaken, we do agree that further improvements are needed to regain the public’s trust. Accordingly, we provide the below table with the corrective actions resolving the OIG report’s recommendations, including estimated timeframes for completion.

Table of Corrective Actions

Rec #	OIG Report Recommendations	Corrective Actions	Completion Dates
1a	OECA Recommendation: Issuing a standardized certification test report template.	<p>EPA agrees with this recommendation. EPA’s Electronic Reporting Tool (ERT) has been updated to include a Wood Heater Application and Certification Module allowing manufacturers to use and submit a standardized certification test report. Until the New Source Performance Standard (NSPS) is revised to require electronic reporting, the use of the ERT wood heater module continues to be voluntary. However, OECA is heavily promoting its use.</p> <p>We are actively talking to wood heater manufacturers and testing labs about the benefits of using the ERT. In February 2023, OECA met with the Hearth, Patio & Barbecue Association (HPBA) and certain HPBA member wood heater manufactures and explained that using the ERT will result in applications for Certificates of Compliance (and renewals) being expedited as they will more likely be free from errors and missing information. At the March 2023 HPBA Expo attended by member wood heater manufacturers and testing labs, OECA further promoted the</p>	<p>Completed: ERT has been updated to include a Wood Heater Module https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert</p> <p>June 30, 2023: ERT training for OECA staff/contractor</p>

		<p>use of the ERT during OECA’s wood heater certification session.</p> <p>Additionally, we are conducting in-depth training for both our staff and contractor to ensure wood heater manufacturers and testing labs have sufficient support when using the ERT and can have their questions adequately addressed in a timely manner.</p> <p>OECA will also continue to consider other means to encourage the use of the ERT such as updating the agency’s wood heater compliance monitoring (CM) page to provide additional information on the ERT and the benefits of using it.</p>	<p>August 31, 2023: Update Wood Heater CM page with ERT information</p>
1b	<p>OECA Recommendation: Developing policies and procedures that detail how to conduct in-depth reviews of certification test reports.</p>	<p>EPA agrees with this recommendation. In consultation with OAR, OECA will continue to review the wood heater certification program and take additional action as appropriate, including the development of policies and procedures that detail how we will conduct in-depth reviews of certification tests. For example, the policies and procedures may include details related to the timing and process for reviewing and updating our test report review checklist. They may also include details related to conducting in-depth reviews for all test reports or a subset of test reports, as appropriate, by our staff and contractor (with the support of OAR’s technical expertise).</p>	<p>November 1, 2024</p>
1c	<p>OECA Recommendation: Periodically observing certification testing.</p>	<p>EPA agrees with the spirit of this recommendation. We understand that the required 30-day testing notice is considered overly burdensome by some wood heater manufacturers and that EPA and delegated states have infrequently opted to observe certification tests. Therefore, given the other oversight tools available to ensure valid tests, OECA will coordinate with OAR in reconsidering this 30-day testing provision as the agency engages in the effort to revise the NSPS. For example, such reconsideration may take into account, among other things, the concerns of interested parties (e.g., the potential burden placed on manufacturers; the benefit for EPA and delegated states to have the</p>	<p>November 30, 2027, in coordination with rule revisions</p>

		<p>opportunity to observe certification tests); the possibility to revise the testing notice provision rather than remove the requirement (e.g., change the required timeframe from 30 days to something less; allow a waiver from such notice upon request); and the potential for having certification tests observed virtually and how such virtual observation could impact the need for prior notice of such testing.</p> <p>Other oversight tools include: Laboratory Proficiency Test Program; rigorous in-depth reviews of all certification test reports; the enhanced use of the ERT and standardized certification test reports to improve the review of such reports (with ERT use becoming required upon revision of the rule); the development and implementation of guidance on conducting compliance audit tests; and timely notifying testing labs and third-party certifiers of identified testing and reporting deficiencies and warning of possible revocation of EPA approval status, as appropriate.</p>	
1d	<p>OECA Recommendation: Developing and implementing guidance for conducting systematic compliance audit tests.</p>	<p>EPA agrees with this recommendation. OECA will develop and implement guidance concerning compliance audit tests. To ensure compliance audit tests are properly performed consistent with the NSPS and in an appropriate manner, we anticipate developing and implementing an internal agency guidance that may provide instruction on issues such as the rationale for choosing a particular wood heater for audit testing, the frequency for conducting audit tests, and the process for ensuring the chosen audit test heater is properly transported to the testing lab for testing.</p>	<p>April 1, 2024</p>
2	<p>OECA Recommendation: In consultation with OAR, define roles and responsibilities within and between OECA and OAR for the residential wood heater program, so that sufficient subject-matter expertise and resources are leveraged</p>	<p>EPA agrees with this recommendation. OECA and OAR will further define respective roles and responsibilities by reviewing the current Delegation of Authority concerning the Wood Heater Program and determining whether and how to revise it.</p> <p>Any revisions to the Delegation of Authority will be reflected in the policies and procedures detailing how we will conduct in-depth reviews</p>	<p>November 1, 2024</p>

	to ensure that certification test reports are substantively reviewed.	of certification tests that will be developed pursuant to Recommendation 1b above.	
3	<p>OECA Recommendation: Develop and implement a plan to demonstrate whether residential wood heaters certified using the test methods based on ASTM E3053 comply with the New Source Performance Standards for residential wood heaters.</p>	<p>Residential wood heaters certified using the now-withdrawn test methods based on ASTM E3053 continue to have legally valid Certificates of Compliance pursuant to the CAA and 2015 NSPS as long as the test reports had no irregularities/problems and no other testing deficiencies have been identified. However, EPA has developed and is implementing a plan to address heaters certified using the test methods based on ASTM E3053. <u>Please see the Wood Heater Compliance Monitoring webpage (https://www.epa.gov/compliance/wood-heater-compliance-monitoring-program) and the Federal Register Notice announcing the withdrawal of the applicable alternative test methods (https://www.federalregister.gov/documents/2022/01/24/2022-01298/withdrawal-of-broadly-applicable-alternative-test-methods).</u></p> <p>That said, OECA agrees with the spirit of this recommendation and understands the OIG’s concerns, especially those related to the uncertainty for states that are concerned about relying on the EPA’s certification process to identify wood heaters to sell in their states or for their changeout programs. Accordingly, OECA will provide OAR and/or the EPA Regions directly with two lists of wood heater model lines. The first list is the “federally cleared list” and will provide model lines that have undergone an in-depth review and were cleared of any identified deficiencies. OECA will update this list to add newly reviewed and cleared model lines on a quarterly basis.</p> <p>The second list will include model lines certified using the now-withdrawn broadly applicable cordwood test methods (ALT 125 and ALT 127) based on ASTM E3053). OECA will regularly update this list to remove the wood heater model lines that have been retested with a new valid certification test using an</p>	<p>Completed: Development and implementation of plan to address heaters certified using test methods based on ASTM E3053</p> <p>June 30, 2023: Initial development and issuance of the two lists of wood heater model lines</p>

		<p>EPA-approved test method. The two lists together help clarify the EPA’s confidence level in the certification status of these model lines. The EPA Regions may then share the two list with their states that are interested in factoring this information into wood heater related decision making.</p> <p>As is already the case, manufacturers may retest at any time and do not have to wait until their current Certificates of Compliance expire to submit renewal applications. OECA will also expedite its review of any such early renewals. Making the cordwood model line list available to EPA Regions and states and committing to expedite our review of these renewal applications may help encourage manufacturers to retest early.</p>	
4	<p>OAR Recommendation: Incorporate the EPA’s certification test report expectations set forth in the April 2022 corrective action list into the upcoming revisions to the New Source Performance Standards for residential wood heaters.</p>	<p>EPA agrees with this recommendation. These revisions will take place through rulemaking that involves a cross agency workgroup. Before EPA proposes changes to these subparts, we need to promulgate new test methods that we are vetting in an extensive precision study, a project now about half-way through. These test methods are specific to <i>Recommendation 5</i>, and these form the critical project path toward NSPS revision, meaning that these must be finalized before revision(s) to the NSPS so that they may be incorporated into the future rule revision. We anticipate moving to revise the NSPS after the test methods have been finalized and a new emissions standard has been determined through data review, as laid out in our response to recommendation #5. With those method promulgation milestones as guideposts, we anticipate a new NSPS proposal in late 2026 or early 2027, depending on small business panel review. Finalizing this rule would follow 12 to 18 months for comment, response and briefings.</p>	<p>November 30, 2027 estimated final rulemaking</p>
5	<p>OAR Recommendation: Develop and adopt an EPA cord wood test method that is supported by data to provide the public reasonable</p>	<p>EPA agrees with this recommendation and we are approaching the half-way mark of this effort. We must promulgate these through notice and comment rulemaking, just like any other regulation, and so there is a good bit of time involved in the overall process of</p>	<p>Wood Heater IDC – Propose in June 2024, finalize in June 2025</p>

	<p>assurance that certified appliances meet emission standards.</p>	<p>finalizing four separate test methods: one for each appliance category. As we finalize each of these, we will hit a key milestone along the way toward meaningful change to EPA’s Residential Wood Heating regulations, including substantial changes to the measurement of particulate emissions. We do not have hard deadlines for reaching these milestones as the process of test method development may call for delays while concerns or issues are dealt with and corrections made leading to a draft final, however once we reach a draft final stage, we will be proposing each of these methods, in turn. Our current expectation for this timeline is, at this time, expected to be as follows:</p> <p>Wood Heater IDC – Propose in June 2024, finalize in June 2025</p> <p>Wood Boiler IDC – Propose in December 2024, finalize in December 2025</p> <p>Pellet Heater IDC – Propose in September 2024, finalize in September 2025</p> <p>Wood Furnace IDC – Propose in June 2025, finalize in June 2026.</p> <p>Following promulgation of each of these test methods we will evaluate our status with respect to data collected with the test method during the precision evaluation AND additional data provided by our NYSERDA and NESCAUM partners in this project to see if we have sufficient data using that test method to support promulgation of a new cord wood standard for that appliance category in a new regulatory proposal. Where we find ourselves needing additional data, we will need to conduct additional testing to support development of a new standard for that appliance category. The new rule will need sufficient data to support new emissions standards that, in turn, rely on the new measurement methods for compliance demonstration testing.</p>	<p>Wood Boiler IDC – Propose in December 2024, finalize in December 2025</p> <p>Pellet Heater IDC – Propose in September 2024, finalize in September 2025</p> <p>Wood Furnace IDC – Propose in June 2025, finalize in June 2026.</p> <p>November 30, 2027 estimated final rulemaking</p>
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6	<p>OAR Recommendation: Establish mechanisms to promote independence between emissions testing labs and third-party certifiers.</p>	<p>EPA agrees with this recommendation and we will incorporate changes to this paradigm in the rulemaking whose schedule we've laid out in reply to recommendation 4, above. In the interim we will continue our oversight of EPA Approved Test Laboratories and Third-Party Certifiers as we have been; sending letters requesting correction to processes and procedures, review of SOP's, and making sure to copy their ISO Accrediting body on the e-mail. This ensures that those requested reviews and adjustments must happen, per ISO requirements, prior to their next audit by the Accrediting body, and that they must demonstrate the corrective measures have been assessed and new procedures resolve the concern(s). Since the 2015 rule effective date, OAR has sent several letters to test labs; one of which directly dealt with the relationship between a test lab and its third-party certification group. Additionally, OAR will continue our oversight of the EPA Approved Test Lab Proficiency Test program; a process instantiated in the rule but without structure. OAR worked closely with all test labs to develop the program and we are continuing to implement this regulatory provision. While we have heard complaints from test labs regarding the cost of this program, we recognize this as an important step in keeping the field level across laboratories. OAR also has plans to begin in-person inspections of laboratories and their procedures in order to better understand the current status of the various laboratories and their particulate measurement practices. Finally, OAR has secured program funding to add one full time FTE dedicated to wood heater test method development and oversight of laboratory and third-party certifiers.</p>	<p>November 30, 2027 estimated final rulemaking</p>
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If you have any questions regarding this final response, please contact Gwendolyn Spriggs, OECA Audit Liaison, at spriggs.gwendolyn@epa.gov or (202) 564-2439, or Grant Peacock, OAR Audit Liaison, at peacock.grant@epa.gov or 202-564-6732.

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