

As of February 1, 2022

The following are issues, findings, and resolutions regarding Alaska's certification test reviews and additional data received by manufacturer's when addressing report deficiencies that were found. Detailed information regarding how ADEC will address the issues, including when and how flags in the summary review sheets are handled may be found below. Issues will be added and resolutions updated as new information becomes available.

Issue #	Issue Regarding Flagged Items in summary sheets	Finding	Resolution	Stays on Approved List
1	Third-party certifier (Cordwood: Lines 11, 12)(Pellet: Lines 11, 12)	Findings and certification of 3rd party review missing or incomplete, refer to Regulatory Basis document section 2.3.	For flag removal, information must be publicly posted on a webpage, and confirmed by ADEC.	Yes
2	Missing 1-hr value or average/emission standard (Cordwood: Line 14) (Pellet: Line 14)	Must be reported for each run, refer to Regulatory Basis document section 3.2.	If a valid test run did not record the value, the entire test will be considered incomplete. Requires a complete new certification test. Move to No Determination List	No - Retest to resolve
3	Failure to report 1-hr value in grams per hour (Cordwood: Line 14) (Pellet: Line 14)	Must be reported for each run, refer to Regulatory Basis document section 3.2.	Basis for conditional decision: cannot determine compliance without calculating gram per hour metric. Required metric under ADEC regulations. If recalculation is above 6 g/hr disapproved appliance. If recalculation <6 g/hr flag removed.	No - Retest to resolve
4	Failure to report efficiency, burn rate, or other required reporting element. (Cordwood: Lines 14, 15, 17, 36, 37, 38, 49, 50, 55, 56) (Pellet: Lines 14, 15, 16, 20, 37, 45)	Must be reported, refer to Regulatory Basis document sections 3.4, 3.5, and 3.6. Cannot be approved.	Emission data must be reported. If data collected but not reported or not in posted report, device moved to No Determination List until new updated report. Flags remain until full test posted, ADEC must confirm publically posted report in order to remove flags. ADEC must also be cc'd on email formally submitting updated report to EPA. ADEC will make a determination once EPA has approved new report and confirms manufacturer posts full test report. Device will be moved to No Determination List unless manufacturer contacted ADEC prior to removal from Approved List to adjust milestone dates.	Conditional
5	Manufacturers instructions - no instructions found (Cordwood: Line 18) (Pellet: Line 18)	Must be reported, refer to Regulatory Basis document section 3.6. Cannot be approved.	Conditional decision basis. If instructions do not contain all written instructions required by the method, data must be submitted to show how this information was communicated to the lab. If data cannot be provided, retesting must be done with complete instructions from the manufacturer to have a valid test under federal regulations.	Conditional
6	Manufacturers instructions - directed lab to owners manual	Used owners manual instructions.	Flag removed.	Yes
7	Manufacturers instructions to lab contradict owners manual operation (Cordwood: Line 18) (Pellet: Line 18)	Test Validity in question, refer to Regulatory Basis document section 5.1.	Retest decision basis. If manufacturer instructions to lab contradict or include instructions not in the owners manual. Appliance must be retested according to owner's manual instructions. Owners' manual instruction changes will not suffice since models have been sold or distributed with older manual and manufacturers cannot provide adequate compliance assurance mechanisms to assure that the older manual will not be used by homeowners.	Retest to resolve
8	Firebox dimensions and calculations - missing. (Cordwood: Lines 19, 20, 21) (Pellet: N/A)	Must be reported, refer to Regulatory Basis document sections 3.7, 3.8, and 3.9. Cannot be approved. Note longest dimensions determine length appropriateness, please make sure largest firebox dimension is listed in cell 19F, and cell 19G is firebox dimension. NOTE: while dimensions may be present, report must include calculations, ADEC will not develop calculations.	Conditional decision basis: If data can be submitted that shows the firebox volume reported was calculated appropriately, flag can be removed. If the data cannot be submitted, unit was not run according to test method and needs to be retested.	Conditional
9	Firebox volume (M28) - questionable measurement	Measurements excluded area that based on M28 definitions is reasonable for use, refer to Regulatory Basis document section 3.7. Determination that firebox volume used for fueling was not correct.	Conditional decision basis: If data can be submitted that shows the firebox volume reported was calculated appropriately, flag can be removed. If the data cannot be submitted, unit was not run according to test method and needs to be retested.	Conditional
10	Firebox volume - manufacturer materials contradict test report. (Cordwood: Line 19) (Pellet: N/A)	Measurements excluded area that based on M28 definitions is reasonable for use, refer to Regulatory Basis document section 3.7. Determination that firebox volume used for fueling was not correct.	Retest decision basis: If difference is greater than 5% test is invalid per federal requirements and must be retested.	Conditional
11	Stove conditioning data - data completeness (Cordwood: Lines 25, 26) (Pellet: Lines 22, 23)	Data provided is incomplete and cannot determine if aging was completed correctly, refer to Regulatory Basis document section 3.14.	Incomplete report, flag remains until data submitted to ADEC, updated report posted and posting confirmed, and ADEC cc'd on email submitting revised report to EPA.	Yes
12	Stove conditioning data - requirements for burn rate	Based on data provided conditioning does not meet burn rate test method requirements, refer to Regulatory Basis document section 3.14.	Conditional decision basis: If data can be submitted that shows the conditioning met the burn rate requirements for the method used, flag can be removed. If the data cannot be submitted, unit was not run according to test method and needs to be retested.	Yes - re-test required to renew cert
13	Stove conditioning - requirements for # of hours	Based on data provided conditioning did not meet the # of hours required by the method, refer to Regulatory Basis document section 3.14.	Conditional decision basis: If data can be submitted that shows the conditioning met the hour requirements for the method used, flag can be removed. If the data cannot be submitted, unit was not run according to test method and needs to be retested.	Yes - re-test required to renew cert
14	Summary narrative - test (run) summary not included in test report (Cordwood: Lines 28, 29, 30) (Pellet: Lines 25, 26, 27)	Summary tables are present but no narrative for the run by run details summarized.	Flag remains in place unless report revised to include narrative. Flag will be cleared when data submitted to ADEC, updated report posted and posting confirmed, and ADEC is cc'd on email submitting revised report to EPA.	Yes

15	Summary narrative - doesn't address negative values, proportionality, or train precision deviations.	Summary narrative does not provide information summarizing deviations, but the information was found in report. Refer to Regulatory Basis document section 3.18.	Flag remains in place unless report revised. Flag will be cleared when data submitted to ADEC, updated report posted and posting confirmed, and ADEC is cc'd on email submitting revised report to EPA.	Yes
16	Photo documentation (Cordwood: Line 32) (Pellet: N/A)	Used ASTM 3053 or M28R - no photographs provided, refer to Regulatory Basis document sections 3.20, 5.7, 5.8, and 5.9.	Flag remains. Photographs are required, at the time of the test, to ensure proper loading configuration and representativeness. ADEC unable to determine compliance with emission requirements.	Yes - re-test required to renew cert
17	Photo documentation (Cordwood: Lines 32, 52) (Pellet: N/A)	Used ASTM 3053 or M28R - some photographs provided but not all pictures provided, loading configuration can be determined. Refer to regulatory basis document sections 3.20, 5.7, 5.8, and 5.9.	Flag remains because not all photos were submitted but enough to determine loading configuration.	Yes
18	Photo documentation (Cordwood: Lines 32, 52) (Pellet: N/A)	Used ASTM 3053 or M28R - photographs provided but loading configuration cannot be determined. Refer to Regulatory Basis document sections 3.20, 5.7, 5.8, and 5.9.	Original lab notes were reviewed for written description. If this is not presented, the unit did not follow the method and loading configuration and representativeness could not be determined. Device moved to No Determination List. After the fact written descriptions cannot be confirmed. Report will be referred to EPA for a finding.	Yes - re-test required to renew cert
19	New test data provided but it's not in the posted report.	Reports must match, and be submitted to EPA for approval. Refer to Regulatory Basis document section 7.3.	Flags remain until full test posted and ADEC has confirmed public access and has been cc'd on email of report submittal to EPA.	Yes
20	Run not used and not reported (Cordwood: Lines 34 - 38) (Pellet: Lines 30 - 37)	Per federal regulation this element is a required reporting element, refer to Regulatory Basis document section 7.2.	Basis for conditional decision. If missing run data was not provided in the report, then confirmation that full test was valid cannot be confirmed. If all data can be provided, then flag removed. If data cannot be provided, retest required to ensure a valid test under federal regulations.	Retest to resolve
21a	Filter plugged during test run after 60-minute (Cordwood: Lines 34 - 38) (Pellet: Lines 30 - 37)	Filters should have been monitored and changed. Refer to Regulatory Basis document section 4.2.	If run data submitted, including 1-hr filter pull, and the 1-hr filter is below Alaska standard, flag for filter plugged but device may be on approved list if no other issues and if evidence is provided that a filter change was not feasible to complete the test run. EPA must make decision of run validity for overall test validity. Flag will remain pending EPA decision.	Yes
21b	Filter plugged during test run after 60-minute (Cordwood: Lines 34 - 38) (Pellet: Lines 30 - 37)	Filters should have been monitored and changed. Refer to Regulatory Basis document section 4.2.	If run data not submitted which could have included a 1-hr filter pull due to filter plug after 60 minutes, see issue #20. Device removed from Approved List pending EPA decision on run and overall test validity.	Retest to resolve
22	Filter plugged during test run (Cordwood: Lines 34 - 38) (Pellet: Lines 30 - 37)	Filters should have been monitored and changed. Refer to Regulatory Basis document section 4.2.	Filter plugged within the first 60 minutes. Concern that there may be a practice to let filters plug in lieu of finishing run and then making a determination of valid or invalid run.	Retest to resolve
23	Negative 1-hr filter value (Cordwood: Line 38) (Pellet: Line 36)	Invalid data = invalid test, refer to Regulatory Basis document sections 4.13 and 4.14.	Manufacturer can submit justification, review committee to make final determination. If incorrect volume used, moved to no determination list or require retesting.	Retest to resolve
24	Filter data (Cordwood: Line 39) (Pellet: Line 38)	Must be reported. Cannot be approved. Refer to Regulatory Basis document section 4.11.	Flags remains until full test posted, ADEC remove flag when posted. ADEC makes determination once EPA approved and manufacturer posts full test report.	Conditional
25	Train precision not reported (Cordwood: Line 40) (Pellet: Line 39)	Train precision is a required element of 2515, must be calculated and reported. Refer to Regulatory Basis document section 4.12.	Test method issue, flags remain, but device may remain on Approved List.	Yes
26	Negative filter weights not handled properly (Cordwood: Line 42) (Pellet: Line 41)	Per Oregon requirements, if acetone rinse not completed, values must be recalculated using zero (0) rather than negative value. Refer to Regulatory Basis document section 4.14.	Basis for conditional decision: If negative filter weights were not handled appropriately, test values must be recalculated and report revised. If values above ADEC limits, unit disapproved, units below value - flag removed, improper procedures that cannot be recalculated require retesting to ensure a valid test under federal regulations.	Conditional
27	Lowest burn rate (Cordwood: Line 46) (Pellet: Line 42)	Need data to confirm - measurement from test report and ISO inspection to confirm on production models. Refer to Regulatory Basis document section 4.15.	Basis for retest decision. If testing data cannot confirm or provides conflicting information, it cannot be assured that unit was tested at the lowest burn rate per the federal regulation. Unit must be retested.	Yes - re-test required to renew cert
28	Fuel Length - Applies only to appliances tested with M28R/ASTM 2780 fuel length piece less than 5/6 longest dimension. (Cordwood: Line 50) (Pellet: N/A)	M28R/ASTM 2780 Testing deviated from method - invalid test. Refer to Regulatory Basis document sections 3.7, 3.8 and 5.5.	Retest decision basis: If log length was not according to the method, test is invalid per federal requirements and must be retested.	Retest to resolve
The following six items, labeled 29 a-f, only apply to units tested with Broadly Applicable Alternative Test Method ASTM 3053. ADEC regulations requires review and approval of the test method prior to accepting units tested with those units. ADEC has determined the following six elements will be reviewed in combination to determine if ADEC can accept the testing to qualify for installation in the FNSB non-attainment area. Tests with three or more items flagged shall not be approved by ADEC.				
29	ASTM 3053 - low and medium burn rate (Cordwood: Line 36) (Pellet: N/A)	Medium and low load testing did not have air setting sufficient to create medium burn and/or med. low burn rate differential was less than 0.30 kg/hr. Concern that this is a non-representative test that impacts emission outcomes.		

29b	ASTM 3053 - fuel length piece less than 5/6 longest dimension. (Cordwood: Line 50) (Pellet: N/A)	ASTM 3053 may be a non-representative test. Refer to Regulatory Basis document sections 3.7, 3.8, and 5.5.	ADEC review of these test reports has raised significant concerns about it's adequacy to appropriately assess device performance. The lack of specificity with regarding to the fueling protocols, representativeness of low and medium burn rates, and ability to vary firebox volume. In lieu of disapproving the method ADEC will work with EPA regarding its findings. The six items identify concerns about testing representiveness. In the interim, ADEC has identified six areas of concern within the method and the subsequent test reports. Those test reports that are generally representative may remain on the Approved List. A non-representative report is one with 3 or more flags within this area of concern. All flags will remain pending an EPA decision.	3 or more flags = No
29c	ASTM 3053 - fuel loaded in atypical direction (E/W stove loaded N/S, mixed, or raised). (Cordwood: Lines 51, 52) (Pellet: N/A)	Testing used fuel loading configurations that do not reflect expected consumer loading practices raised concern that this is a non-representative test that impacts emission outcomes. Refer to Regulatory Basis document sections 5.6 and 5.7.		
29d	ASTM 3053 - more than 50% of the pieces were squared in shape (Cordwood: Line 53) (Pellet: N/A)	Testing used fuel where 50% or more of the pieces are square. This minimizes emissions and is considered a non-representative test per EPA memo that impacts emission outcomes. Refer to Regulatory Basis document section 5.8.		
29e	ASTM 3053 - less than 50% of the pieces had no bark (Cordwood: Line 54) (Pellet: N/A)	Testing used fuel where 50% or more of the pieces didn't have bark. This minimizes emissions and is considered a non-representative test per EPA memo that impacts emission outcomes. Refer to Regulatory Basis document section 5.9.		
29f	ASTM 3053 - firebox volume (Cordwood: Line 19) (Pellet: N/A)	Manufacturers did not use full firebox volume to calculate fuel volumes. Refer to Regulatory Basis document section 5.10.		
30	Owner's manual (Cordwood: Lines 59-74) (Pellet: Lines 49-61)	Owners manual does not contain all requirements from federal regulation. Refer to Regulatory Basis document sections 6.1 through 6.16.	Flag(s) remain for deficiencies. ADEC can still approve with flags remaining for Owner's manual issues.	Yes
31	30-day notice before testing and 60-day post test submission. (Cordwood: Lines 81, 84) (Pellet: Lines 68, 71)	Required element of test report per EPA definition and correspondence requirements. Refer to Regulatory Basis document section 7.6.	Actual EPA form and emails must be attached to posted test report. Follows same requirements as posting new data for test report.	Yes
32	Non-consecutive days (Cordwood: Line 83) (Pellet: Line 70)	Testing was not conducted on consecutive days. Refer to Regulatory Basis document section 7.8.	Flag remains in place, flagged because summary data turned in was incomplete and if non-consecutive testing was not highlighted and reason not presented. Flag is removed if report updated and posted and ADEC has confirmed posting. Revised report must also be submitted to EPA and ADEC cc'd in order for flag to be removed.	Yes
33	Time between lab receipt of stove and certification testing > one month (Cordwood: Line 80) (Pellet: Line 67)	Justification for delay should have been included in narrative. Test report incomplete. Refer to Regulatory Basis document section 7.8.	Flag remains in place, flag because summary data turned in was incomplete and if non-consecutive testing was not highlighted and reason presented. Flag is removed if report updated and posted and ADEC has confirmed posting. Revised report must also be submitted to EPA and ADEC cc'd in order for flag to be removed.	Yes
34	Report not publicly available/could not find report.	ADEC unable to find report on a publicly available web page. Submitted links of reports that cannot be independently verified on a publicly available web page are also considered as 'not able to find report'.	To remove flag and move off of the Disapproved List due to this issue, report must be easily accessed via search engine.	No
35	CO Individual Run (Cordwood: Line 16) (Pellet: Line 17)	Individual run CO emissions not reported or missing. Must be reported, refer to Regulatory Basis document sections 3.4.	Flag remains. Referred to EPA for an applicability determination	Conditional
36	Medium burn rate must be 50% or less than high burn. (Cordwood: N/A) (Pellet: Lines 31, 32)	Medium burn rate must be 50% or less of the high burn rate. ASTM E2779 method requirement.	Retest decision basis. If medium burn rate for pellet stove test does not meet method requirements, test was not valid under federal regulations.	Conditional
37	Pellet fuel analysis not completed. (Cordwood: N/A) (Pellet: Line 47)	Ultimate analysis must be completed on pellet fuel.	Flag remains. Referred to EPA for an applicability determination	Yes - re-test required to renew cert
38	Zero and/or negative filter weight for 1-hr filter pull	Invalid under federal regulation, negative or zero PM emissions not possible if wood is burning.	Basis for retest decision: 1) invalid result under federal regulation, negative or zero PM emissions not possible if wood is burning. Test cannot be valid and therefore a retest is required.	Retest to resolve
39	Check that both front and back filters were used.	ASTM 2515 requires measurement of both front and back filters together. Front filter measurement does not capture full results. Incomplete test per federal regulation.	Basis for retest decision: 1) method requires measurement of both front and back filters together. Front filter measurement does not capture full results. Incomplete test per federal regulation.	Conditional
40	Verify that tunnel specs meet federal requirements.	Dilution tunnel specifications must meet requirements in ASTM 2515	Basis for conditional decision: if unit schematic complies with ASTM 2515 requirements, test is valid, flag removed. If unit schematic does not meet ASTM 2515 requirements, invalid test per PM measurement method under federal regulations. Must retest.	Conditional
41	Pre-test leak check reported	ASTM 2515 require pre-test leak check of sample train	Basis for conditional decision: If pretest leak check conducted properly, flag removed. If pretest leak check not conducted, invalid test per federal regulations. Must retest.	Yes
42	Leak check after any filter change reported	ASTM 2515 requires leak check in the sample train after any filter is changed	Basis for conditional decision: If post-filter change leak check conducted properly, flag removed. If post-filter change not conducted, invalid test per federal regulations. Must retest.	Yes
43	Post leak check reported	ASTM 2515 requires a post-test leak check of sample train	Basis for conditional decision: If post-test leak check conducted properly, flag removed. If post-test leak check not conducted, invalid test per federal regulations. Must retest.	Conditional

44	Proportional sampling maintained during test	Proportional sampling must be maintained per federal requirements	Basis for conditional decision. If proportional sampling out of range, invalid test per federal requirements, retesting required. If proportional sampling issues occurred within allowable tolerances but not reported in run summary, report must be revised. If all sampling proportional, no flag.	Retest to resolve
45	Negative probe weight greater than 5% of particulate catch	Federal requirements do not allow for a negative probe weight that is greater than 5% of the particulate catch.	Basis for retest: If negative probe weight greater than 5% of filter catch (mg) then it is an invalid test per federal regulatory requirements.	Retest to resolve
46	Negative probe weights handled appropriately		Basis for conditional decision: If recalculation revises values above ADEC limits, appliance disapproved. If values are below ADEC emission limits but proper procedures not followed, retest required.	Conditional
47	Negative probe weight	Negative probe weight should not be subtracted from filter weight	Basis for conditional decision: If recalculation revises values above ADEC limits, appliance disapproved. If values are below ADEC emission limits and proper procedures followed, flag removed. If proper procedures were not followed or data cannot be provided, there is insufficient data to confirm a valid test has been completed per federal regulations, retest required.	Retest to resolve
48	Negative room air values handled appropriately		Basis for conditional decision: If negative room values not handled appropriately, test values must be recalculated and report revised. If values above ADEC limits, unit disapproved, units below value - flag removed, improper procedures that cannot be recalculated require retesting.	Conditional
49	Fuel moisture content must be between 19.0% and 25.0%	Method requires all fuel moisture to be between 19.0% and 25.0%.	Retest decision basis: If fuel moisture was not according to the method, test is invalid per federal requirements and must be retested.	Retest to resolve
50	More than one log length used	allows for only one nominal fuel length per appliance	Retest decision basis: If log length was not according to the method, test is invalid per federal requirements and must be retested.	Retest to resolve
51	ASTM3053. Fuel load specific gravity requirements.	Fuel specific gravity not reported or did not meet testing requirements.	Conditional decision basis: If data can be submitted that shows the fuel specific gravity requirements were met, flag can be removed. If the data cannot be submitted, it cannot be verified that the unit was run according to test method and needs to be retested.	Conditional
52	ASTM 3053. Filter media reported	Filter media must be teflon coated glass fiber	Conditional decision basis: If data can be submitted that shows the correct filter media was used, flag removed. If the data cannot be submitted, it cannot be verified that the unit was run according to test method and needs to be retested under federal regulations.	Conditional
53	ASTM 3053. Filters weighed in pairs	All filters must be weighed in pairs	Conditional decision basis: If data can be submitted that shows weighing in pairs under method conditions, flag removed. If the data cannot be submitted, it cannot be verified that the unit was run according to test method and needs to be retested under federal regulations.	Conditional
54	Documentation must be provided in report for the primary air settings used.	Air setting documentation not provided.	Conditional decision basis: If data can be submitted that shows the appliance was conditioned according to the burn rates specified in the test method, flag removed. If the data cannot be submitted, it cannot be verified that the unit was run according to test method and needs to be retested under federal regulations.	Conditional
55	ASTM E2779. Maximum burn rate criteria must be documented in the test report	Maximum burn rate criteria not reported or contradicts other information such as advertising or owners manual	Retest decision basis. If manufacturer instructions to lab contradict or include instructions not in the owners manual. Appliance must be retested according to owner's manual instructions. Owners' manual instruction changes will not suffice since models have been sold or distributed with older manual and manufacturers cannot provide adequate compliance assurance mechanisms to assure that the older manual will not be used by homeowners.	Retest to resolve
56	ASTM E2779. Test runs averaged correctly.	Additional test runs were not properly averaged per the testmethod.	Conditional decision basis. Test report values must be recalculated. If values exceed ADEC thresholds, unit disapproved. If values meet ADEC standards, flag removed.	Conditional
57	ASTM E2779. Number of test runs completed	Number of test runs not reported or data missing from runs	Conditional decision basis. Test report values must be recalculated. If values exceed ADEC thresholds, unit disapproved. If values meet ADEC standards, flag removed.	Conditional
58	ASTM E2779. Pre-ignition data.	Pre-ignition data must be included in report.	Submit Pre-ignition data.	Yes
59	Certification expired without retest	Certification expired and sufficient deficiencies remain such that a retest is required in order to renew certification.	If a test report is on the approved list pending milestone data or is on the approved list with deficiencies flagged that require a retest prior to renewal, when the 5 year EPA certification expires the test report will be moved to the no determination list until a new report accompanied by an EPA certification is reviewed and approved by the State of Alaska.	Retest to resolve