

**From:** [John Voorhees](#)  
**To:** [Dec Air Comment](#)  
**Cc:** [Brandon Barry](#); [August Jones](#); ["John Crouch"](#); [Damen Jeg](#); [Steffan Johnson \(johnson.steffan@epa.gov\)](#)  
**Subject:** Fairbanks PM2.5 Serious SIP  
**Date:** Wednesday, July 24, 2019 1:01:52 PM

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Greetings Ms. Heil,

We, at US Stove are very concerned with some of the proposals your department has put forth in the Fairbanks PM2.5 Serious SIP in regards to woodstove installations. Here are a couple of comments to consider:

1. In Section 7.7.5.1.2 Device Requirements, you are proposing the use of the TEOM. I am very concerned about the use of this device for determining compliance.  
A: This device is something that NESCAUM has used for R & D purposes and it is my understanding it is used for ambient air stations, not for use in dilution tunnel testing. There is little data that has been generated to prove this device can be used for certification purposes.  
B: What EPA certified laboratories have used the TEOM in conjunction with EPA wood heater testing?  
C: The data that I have read, used a non-consensus based test standard to generate the data. In Appendix III.D.7.07 there is reference to a paper submitted by NESCAUM, "Comparison of Emission Profiles" The cover of this document states "2017 Partial Results" I have concerns about a regulation being written on "Partial Results". In addition, you have reference to a document submitted by Lisa Rector of NESCAUM "Preliminary data comparing replicates from Catalytic/Hybrid Appliances and Non-Catalytic Appliances". This document makes reference to data generated by the IDC Test Method. This method is not a consensus based test standard and is still under development. As Ms. Rector has stated in her report to you, this is preliminary data. I have major concerns that a regulation is being proposed with the supporting premise based on "partial and preliminary" data.  
D: Has an analysis been done to determine the additional cost for testing and who is going to be burdened with that additional cost?
2. We have a fully vetted NSPS for Residential Wood Heaters with prescribed test methods. How can you be considering an additional test method that has not been vetted which has the potential of excluding EPA compliant models from the marketplace?
3. Has there been any research to determine how often a consumer starts their woodstove in the winter from a cold start? I would have to assume that most woodstoves are run continuously during the winter months. I know you have data to show that most if not all fuel fired devices start off with a spike in emissions when cold. I don't understand the rationale for an additional test since that "spike" in emissions is taken into account for the total emissions number generated for certification.
4. When a non-catalytic stove starts, the technology begins to work as the stove warms up. One point that has not been mentioned is a catalytic stove usually has to be started with the bypass open. This is needed to develop a draft in the stove to allow the catalyst to operate correctly. Therefore, there are uncontrolled emissions going up the chimney for the first 5-10 minutes during start-up.
5. My last point that needs to be emphasized is that the final g/hr number generated by the EPA Certification Testing takes the full burn cycle into account. Therefore, why separate out and penalize different technologies in wood stoves if what you are just trying to achieve is a cleaner airshed? A 2.0 g/hr or 2.5 g/hr stove is just exactly that whether it is catalytic or non-catalytic.

Thank you for reviewing our concerns.

Sincerely,



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