

## **Stove Proficiency and Particulate Emission Rates**

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## **Summary**

As per §60.535(7) Standards of Performance for New Stationary Sources; New Residential Wood Heaters (Federal Register v. 53, n. 38, February, 26,1988), accredited laboratories, “Agree to participate annually in a proficiency testing program conducted by the Administrator.” Between 1993 and 2000 a single stove model was used for this proficiency testing program. The results were obtained from EPA for results submitted by eight laboratories during that time period. The variation in results is shown in Figure 1.

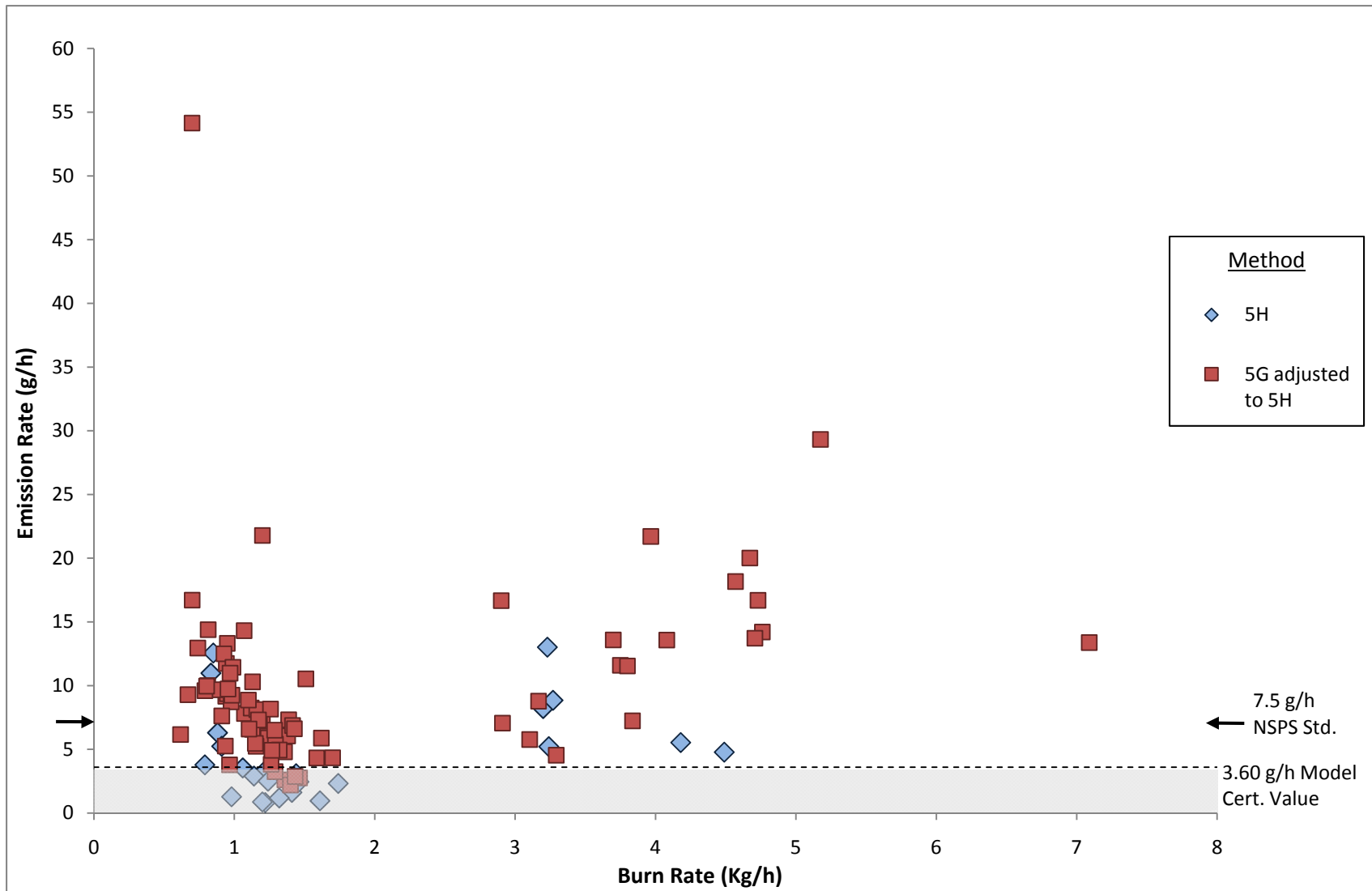


Figure 1: 5H Particulate Emission Rates as Compared to U.S. EPA Certified Value. U.S. EPA NSPS Proficiency Testing Program 40 CFR §60.534, data show testing by eight laboratories with a single non-certified stove model (1993-2000) following NSPS methods 28 and 5G or 5H. (Data courtesy of U.S. EPA)

**Table 2**  
**Particulate Emission Rates, Proficiency Data, Single Stove Model (1993-2000)**

Method	n	Mean	Median	Range	Standard Deviation
5H	24	4.64	3.44	0.82 – 13.02	3.65
5G adjusted	78	9.86	8.20	2.20 – 54.14	7.11
5H + 5G <sub>adj</sub>	102	8.63	7.24	0.82 – 54.14	6.82

NSPS Standard = 7.5 g/h

Model Certification Value = 3.60 g/h