MHA Technical Committee Report

March 19, 2015

MHA has been working to obtain EPA recognition for masonry heaters dating back to 1991. This year, EPA published a draft proposal for masonry heater regulation in the new NSPS (New Source Performance Standard) that comes into effect on May 15.

EPA's draft proposal was based on existing woodstove regulations. For masonry heaters, some of the proposals were impractical. For example, it required standardized “models and model lines” to be tested. A sample of each tested model would have been required to be stored in a warehouse under seal indefinitely – clearly nobody had given consideration to the logistics of moving and storing site-built 5 ton appliances. In addition, it is not feasible to test heaters for emissions using the currently prescribed EPA Method 28. It requires putting the appliance on a weight scale in order to determine its burn rate. No proposals for separate masonry heater test methods were offered in the draft.

MHA’s Technical Committee responded to EPA’s draft regulation with a thoroughly researched and elaborated counter proposal, the result of countless hours of volunteer effort. Our submittal proposed alternate test methods. It also advocated for the European method of certifying proper masonry heater performance via a software design algorithm based on Euro-Standard EN-13384. EPA has recognized these efforts, and in the recently published NSPS has chosen to defer regulation of masonry heaters until MHA can develop these methods to the point that 3rd party certification meeting EPA requirements can be obtained. The technical committee currently estimates that it will require 3 - 5 years of additional work to achieve this goal.

Damien Lehmann from France joins us this year at Wildacres. He is an engineer and heaterbuilder with a background in industrial control systems and software development, andhas spent the last 7 years developing an open source masonry heater design calculationprogram. In this year’s 5-run heater build at Wildacres, we will continue to develop theheater field testing theme that we started last year. It provides an educational opportunityfor all, and an opportunity for the technical committee to meet for some informal hands-
on development. This will help guide the more formal effort we are embarking on to gather the necessary test data so that we can develop the certification software and prove it out on real heaters.

Norbert Senf
Chair, MHA Technical Committee