MAINE ENERGY SYSTEMS

Maine Energy Systems' ÖkoFEN 36 KW, 48KW and 56KW boilers have met very stringent proposed EPA emission standards

The US Environmental Protection Agency has proposed rules to take effect on December 16, 2010, which would hold heating and process boilers as "area sources of hazardous air pollutants" to extremely stringent emissions standards in commercial, industrial, and institutional application. Average CO emissions for biomass fueled boilers must be at, or below, 100 ppm @ 7% O_2, and particulate emissions must be at, or below, 0.03 lb/MMBTU.

The proposed rules are receiving substantial critical review and response from the industry. Comments are focusing on issues ranging from data sample selection, to data collection methods, to surrogacy assumptions with various fuel types, to assumptions about the practical availability of control technologies to achieve the proposed emissions levels. It is not clear at this time whether or not the rules will be promulgated as proposed.

Maine Energy Systems' 36 KW (123,000BTU), 48KW (164,000BTU), and 56KW (191,000BTU) ÖkoFEN pellet-fired boiler systems have met the proposed standards of 100 ppm CO at 7% O_2 and particulate emissions ≤0.03 lb/MMBTU in a certified testing laboratory setting. This compliance is reported in independent product testing completed at the laboratories of Francisco Josephinum Wieselberg, BLT.

CO testing yielded the following results averaged over the full test duration:

Carbon monoxide ppm 76.6 (average)

Dust emissions and Organic Carbon emissions were determined at Nominal and Minimum output levels and reported in mg/MJ. Both emissions sources were used in weighted average computations performed in lb/MMBTU by the Maine Department of Environmental Protection. The weighting valued the higher emission Minimum output values at 90% and the lower emission Nominal output values at 10%. The average particulate emission, reported with the same significance as that used in the proposed rules, follows:

Average Annual Particulate Matter Emission 0.03 lb/MMBtu heat output

The ÖkoFEN 36 KW, 48KW and 56KW pellet-fired boiler systems have met, or exceeded, proposed EPA standards for biomass fired boilers in a laboratory installation. If enacted, EPA proposed standards would require onsite verification of compliance.