

COMPARISON OF FINAL FEB 2011 BOILER MACT LIMITS TO JUN 2010 PROPOSED BOILER MACT LIMITS

HAP/Fuel	Proposal	Final	Factor Better	Proposal	Final	Factor Better	Units	Output Based (lb/MMBtu steam output)	
	Existing Boilers			New Boilers				Existing	New
	Hg Biomass	0.9	4.6	5.1	0.2	3.5		17.5	lb/TBtu
PM Biomass	0.02	0.039	2.0	0.008	0.0011	0.1	lb/MMBtu	0.038	0.0011
HCl Biomass	0.006	0.035	5.8	0.004	0.0022	0.6	lb/MMBtu	0.04	0.0021
Hg Coal	3	4.6	1.5	2	3.5	1.8	lb/TBtu	4.50E-06	3.40E-06
PM Coal	0.02	0.039	2.0	0.001	0.0011	1.1	lb/MMBtu	0.038	0.0011
HCl Coal	0.02	0.035	1.8	0.00006	0.0022	36.7	lb/MMBtu	0.04	0.0021
Hg Oil	4	3.5	0.9	0.3	0.21	0.7	lb/TBtu	3.30E-06	2.00E-07
Hg Oil non-continental	4	0.78	0.2	0.3	0.78	2.6	lb/TBtu	8.00E-07	8.00E-07
PM Oil	0.004	0.0075	1.9	0.002	0.0013	0.7	lb/MMBtu	0.0073	0.001
HCl Oil	0.0009	0.00033	0.4	0.0004	0.0032	8.0	lb/MMBtu	0.003	0.003
Hg Gas 2	0.2	13	65.0	0.2	7.9	39.5	lb/TBtu	7.80E-06	2.00E-07
PM Gas 2	0.05	0.043	0.9	0.003	0.0067	2.2	lb/MMBtu	0.026	0.004
HCl Gas 2	0.000003	0.0017	566.7	0.000003	0.0017	566.7	lb/MMBtu	0.001	0.003
Or clean gas 2 can opt in to Gas 1 work practice if:	NA	Hg content <40 ug/m3		NA	Hg content <40 ug/m3		-	NA	NA
		H ₂ S content <4ppmv			H ₂ S content <4ppmv		-	NA	NA
CO Biomass stoker	560	490	0.9	560	160	0.3	ppm at 3%O ₂	0.35	0.13
CO Biomass FB	250	430	1.7	40	260	6.5	ppm at 3%O ₂	0.28	0.18
CO Biomass Dutch/Suspension	1010	470	0.5	1010	470	0.5	ppm at 3%O ₂	0.45	0.45
CO Biomass Fuel Cell	270	690	2.6	270	470	1.7	ppm at 3%O ₂	0.34	0.23
CO Biomass Hybrid Suspension/Grate	NA	3500	NA	NA	1500	NA	ppm at 3%O ₂	2	0.84
CO Coal pulverized	90	160	1.8	90	12	0.1	ppm at 3%O ₂	0.14	0.01
CO Coal stoker	50	270	5.4	7	6	0.9	ppm at 3%O ₂	0.25	0.005
CO Coal FB	30	82	2.7	30	18	0.6	ppm at 3%O ₂	0.08	0.02
CO Oil	1	10	10.0	1	3	3.0	ppm at 3%O ₂	0.0083	0.0026
CO Oil non-continental	1	160	160.0	1	51	51.0	ppm at 3%O ₂	0.13	0.043
CO Gas2	1	9	9.0	1	3	3.0	ppm at 3%O ₂	0.005	0.002
D/F Biomass stoker	0.004	0.005	1.3	0.00005	0.005	100.0	ng/dscm at 7%O ₂	4.40E-12	4.40E-12
D/F Biomass FB	0.004	0.02	5.0	0.007	0.02	2.9	ng/dscm at 7%O ₂	1.80E-11	1.80E-11
D/F Biomass Dutch/Suspension	0.03	0.2	6.7	0.03	0.2	6.7	ng/dscm at 7%O ₂	1.80E-10	1.80E-10
D/F Biomass Fuel Cell	0.02	4	200.0	0.0005	0.003	6.0	ng/dscm at 7%O ₂	3.50E-09	2.86E-12
D/F Biomass Hybrid Suspension/Grate	NA	0.2	NA	NA	0.2	NA	ng/dscm at 7%O ₂	1.80E-10	1.80E-10
D/F Coal pulverized	0.004	0.004	1.0	0.002	0.003	1.5	ng/dscm at 7%O ₂	3.70E-12	2.80E-12
D/F Coal stoker	0.003	0.003	1.0	0.003	0.003	1.0	ng/dscm at 7%O ₂	2.80E-12	2.80E-12
D/F Coal FB	0.002	0.002	1.0	0.00003	0.002	66.7	ng/dscm at 7%O ₂	1.80E-12	1.80E-12
D/F Oil	0.002	4	2000.0	0.002	0.002	1.0	ng/dscm at 7%O ₂	9.20E-09	4.60E-12
D/F Gas2	0.009	0.08	8.9	0.009	0.08	8.9	ng/dscm at 7%O ₂	3.90E-11	4.10E-12

Follow manufacturer's recommended procedures for minimizing periods of startup and shutdown.

Emission limits are 30-day averages where CEMS are used (e.g., PM CEMS for residual oil or solid fuel units >250 MMBtu/hr).