



The average results for the tests conducted at the Boiler No. 1, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Power Output (MWh/day)*	-	-	-	386	-
Average Combustion Zone Temp. (°C)*	-	-	-	1231	-
Steam (tonnes/day)*	-	-	-	797	-
MSW Combusted (tonnes/day)*	-	-	-	222	-
NOx Reagent Injection Rate (liters/day)*	-	-	-	1271	-
Carbon Injection (kg/day)*	-	-	-	130	-
Lime Injection (kg/day)*	-	-	-	4772	-
Filterable Particulate (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.97	0.78	1.09	0.95	9
PM <sub>10</sub> with Condensable (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<6.16	<6.22	<6.56	<6.31	-
PM <sub>2.5</sub> with Condensable (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<5.80	<5.85	<6.21	<5.95	-
Hydrogen Fluoride (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.13	<0.14	<0.14	<0.14	-
Ammonia (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	1.36	1.44	1.24	1.35	-
Cadmium (µg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.048	0.11	0.065	0.074	7
Lead (µg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.53	0.40	0.25	0.39	50
Mercury (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.067	0.038	0.047	0.051	15
Antimony (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.17	<0.17	<0.16	<0.17	-
Arsenic (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.042	<0.042	<0.041	<0.042	-
Barium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	3.31	3.05	3.95	3.44	-
Beryllium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.042	<0.042	<0.041	<0.042	-
Chromium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	1.04	5.66	0.70	2.47	-
Cobalt (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.040	0.037	0.022	0.033	-
Copper (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	1.73	1.78	1.54	1.68	-
Molybdenum (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	4.89	4.74	4.82	4.81	-
Nickel (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	1.10	1.18	0.74	1.01	-
Selenium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.11	<0.11	<0.10	<0.10	-
Silver (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.084	<0.085	<0.082	<0.084	-
Thallium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.21	<0.21	<0.20	<0.21	-
Vanadium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.032	<0.032	<0.031	<0.031	-
Zinc (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	5.90	4.67	3.59	4.72	-
Dioxins and Furans (pg TEQ/Rm <sup>3</sup> ) <sup>(3)</sup>	<7.62	<5.86	<14.8	<9.44	60
Total Chlorobenzenes (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<278	<275	<280	<278	-
Total Chlorophenols (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<583	<577	<588	<583	-
Total PAHs (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<1999	<1978	<2018	<1998	-
Total VOCs (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<261	<188	<244	<231	-
Organic Matter (THC) (ppm, dry) <sup>(2)</sup>	0.9	2.2	1.3	1.5	-
Quench Inlet Dioxins and Furans (pg TEQ/Rm <sup>3</sup> ) <sup>(3)</sup>	1004	804	1051	953	-
Quench Inlet Organic Matter (THC) (ppm, dry) <sup>(2)</sup>	6.7	3.5	3.5	4.6	50

\* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume



The average results for the tests conducted at the Boiler No. 2, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Power Output (MWh/day)*	-	-	-	385	-
Average Combustion Zone Temp. (°C)*	-	-	-	1216	-
Steam (tonnes/day)*	-	-	-	796	-
MSW Combusted (tonnes/day)*	-	-	-	218	-
NOx Reagent Injection Rate (liters/day)*	-	-	-	1308	-
Carbon Injection (kg/day)*	-	-	-	127	-
Lime Injection (kg/day)*	-	-	-	5174	-
Filterable Particulate (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.94	1.17	1.01	1.04	9
PM <sub>10</sub> with Condensable (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<10.2	<10.1	<8.74	<9.67	-
PM <sub>2.5</sub> with Condensable (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<9.91	<9.71	<8.41	<9.34	-
Hydrogen Fluoride (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.14	<0.14	<0.15	<0.14	-
Ammonia (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	25.5	25.9	20.2	23.9	-
Cadmium (µg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.20	0.060	0.10	0.12	7
Lead (µg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.26	0.37	0.23	0.28	50
Mercury (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.032	0.028	0.036	0.032	15
Antimony (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.17	<0.17	<0.17	<0.17	-
Arsenic (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.042	<0.043	<0.043	<0.042	-
Barium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	3.14	2.97	2.12	2.74	-
Beryllium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.042	<0.043	<0.043	<0.042	-
Chromium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.68	1.58	0.67	0.98	-
Cobalt (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.014	0.011	<0.011	<0.012	-
Copper (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	1.55	1.56	3.38	2.16	-
Molybdenum (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	4.96	5.00	4.79	4.92	-
Nickel (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	0.67	0.99	0.57	0.75	-
Selenium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.10	<0.11	<0.11	<0.11	-
Silver (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.084	<0.086	<0.086	<0.085	-
Thallium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.21	<0.21	<0.21	<0.21	-
Vanadium (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<0.031	<0.032	<0.032	<0.032	-
Zinc (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	4.29	5.19	1.13	3.54	-
Dioxins and Furans (pg TEQ/Rm <sup>3</sup> ) <sup>(3)</sup>	<6.75	<6.50	<5.96	<6.40	60
Total Chlorobenzenes (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<325	<356	<319	<333	-
Total Chlorophenols (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<818	<607	<574	<666	-
Total PAHs (ng/Rm <sup>3</sup> ) <sup>(1)</sup>	<2343	<2426	<2295	<2355	-
Total VOCs (µg/Rm <sup>3</sup> ) <sup>(1)</sup>	<219	<214	<217	<217	-
Organic Matter (THC) (ppm, dry) <sup>(2)</sup>	2.1	2.1	1.0	1.7	-
Quench Inlet Dioxins and Furans (pg TEQ/Rm <sup>3</sup> ) <sup>(3)</sup>	708	886	874	822	-
Quench Inlet Organic Matter (THC) (ppm, dry) <sup>(2)</sup>	4.3	4.7	3.0	4.0	50

\* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

Boiler No.	Parameter	Minimum	Average	Maximum	In-Stack Limit
Boiler No. 1	Carbon Monoxide (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	7.3	11.4	18.3	40
	Hydrogen Chloride (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.4	1.2	1.8	9
	Nitrogen Oxides (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	111	112	113	121
	Sulphur Dioxide (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	0	0.8	1.3	35
Boiler No. 2	Carbon Monoxide (mg/Rm <sup>3</sup> ) <sup>(1)</sup>	10.3	15.7	25.8	40
	Hydrogen Chloride (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	0.8	1.2	1.6	9
	Nitrogen Oxides (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	112	113	115	121
	Sulphur Dioxide (mg/Rm <sup>3</sup> ) <sup>(2)</sup>	0	0.9	3.1	35

(1) 4-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume

(2) 24-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume