Appendix A-1

Summary of Results
Engine #1

Waste Management Disposal Services of Maine, Inc.
Engine # 1
Emissions Results

Run No.		**1**	**2**	**3**	
Date:		**9/3/09**	**9/3/09**	**9/3/09**	
Start Time		**07:30**	**08:50**	**10:02**	
Stop Time		**08:38**	**10:00**	**11:08**	**Average**
Net Sampling Time, (minutes)		64	64	64	64
Volume of Gas Collected, (dscf)		48.505	46.233	45.882	46.873
Dry Mole Fraction		0.8765	0.8627	0.8703	0.8698
CO_2 Concentration, (% dry)		10.3	10.3	10.2	10.3
O_2 Concentration, (% dry)		8.5	8.4	8.3	8.4
CO and N_2, (% dry)		81.2	81.3	81.5	81.3
Stack Pressure, (inches of mercury)		30.1	30.1	30.1	30.1
Average Stack Temperature, (°F)		786	785	807	793
Stack Gas Velocity, (afpm)		7,798	7,688	7,757	7,748
Stack Flowrate, (acfm)		10,889	10,734	10,830	10,818
Stack Flowrate, (scfm)		4,641	4,579	4,540	4,587
Stack Flowrate, (dscf/min)		4,068	3,951	3,951	3,990
Stack Flowrate, (dscm/hr)		6,912	6,714	6,714	6,780
Engine Process Data					
Engine Efficiency, %		80.4	80.4	80.4	80.4
Engine Power, KW		1,550	1,550	1,550	1,550
Heat Input, MMBtu/hr		7.400	7.418	7.443	7.420
Brake horse power, bhp		1,671.2	1,671.2	1,671.2	1,671.2
Emissions	**Limit**				
Particulate Matter Catch, mg		1.8	1.0	1.2	1.3
Particulate Matter Grain Loading, gr/dscf		0.0006	0.0003	0.0004	0.0004
Particulate Matter Grain Loading, gr/acf		0.0002	0.0001	0.0001	0.0002
Particulate Matter Emission Rate, lbs/MMBtu	**0.05**	0.003	0.002	0.002	0.002
Particulate Matter Emission Rate, lbs/hr	**0.85**	0.02	0.01	0.01	0.01
CO, ppmvd		**570.3**	**578.0**	**577.3**	**575.2**
CO, lb/hr		**10.1**	**10.0**	**9.9**	**10.0**
CO, g/bhp-hr	**4.2**	**2.7**	**2.7**	**2.7**	**2.7**
NO_x, ppmvd		**67.9**	**67.7**	**67.8**	**67.8**
NO_x, lb/hr		**2.0**	**1.9**	**1.9**	**1.9**
NO_x, g/bhp-hr	**0.6**	**0.5**	**0.5**	**0.5**	**0.5**

Waste Management Disposal Services of Maine, Inc.
Engine # 1
Isokinetic Summary Sheet

Run No.	**1**	**2**	**3**	
Date:	**9/3/09**	**9/3/09**	**9/3/09**	
Start Time	**7:30**	**8:50**	**10:02**	
Stop Time	**8:38**	**10:00**	**11:08**	**Average**
Barometric Pressure, (inches of mercury)	30.12	30.12	30.12	30.12
Net Sampling Time, (minutes)	64	64	64	64
Nozzle Diameter (inches)	0.218	0.218	0.218	0.218
Volume Metered, (cubic feet)	49.045	48.381	48.253	48.560
Average Dry Gas Meter Temperature, (°F)	77	95	98	90
Average ΔH, (inches of water)	1.91	1.85	1.88	1.88
Average ΔH, (inches of mercury)	0.1403	0.1358	0.1381	0.1381
Dry Gas Meter Calibration Factor (Y) Meterbox # 80823	0.9910	0.9910	0.9910	0.9910
Dry Gas Meter ΔH @	1.892	1.671	1.671	1.745
Volume of Gas Collected, (dscf)	48.378	46.112	45.762	46.750
Total Water Collected, (mL)	145.0	156.0	145.0	148.7
Volume of Water Vapor, (scf)	6.837	7.355	6.837	7.010
Moisture, (percent)	12.4	13.8	13.0	13.0
Dry Mole Fraction	0.8762	0.8624	0.8700	0.8695
Isokinetics, (percent)	100.2	98.3	97.6	98.7
CO_2 Concentration, (percent dry)	10.3	10.3	10.2	10.3
O_2 Concentration, (percent dry)	8.5	8.4	8.3	8.4
CO and N_2, (percent dry)	81.2	81.3	81.5	81.3
Dry Molecular Weight, (lb/lb mole)	29.99	29.98	29.96	29.98
Wet Molecular Weight, (lb/lb mole)	28.50	28.34	28.41	28.42
Excess Air at Stack, (percent)	65.7	64.3	62.8	64.3
Stack Area, (square inches)	201.1	201.1	201.1	201.1
Static Pressure, (inches of water)	-0.3	-0.3	-0.2	-0.3
Stack Pressure, (inches of mercury)	30.10	30.10	30.11	30.10
Average Stack Temperature, (°F)	786	785	807	793
Average Sqroot of ΔP	1.5017	1.4767	1.4788	1.4857
SDE Average	53.008	52.104	52.644	52.585
Pitot Coefficient	0.84	0.84	0.84	0.84
Stack Gas Velocity, (actual feet per minute - afpm)	7,799	7,688	7,757	7,748
Stack Flowrate, (actual cubic feet per minute - acfm)	10,889	10,735	10,831	10,818
Stack Flowrate, (standard cubic feet per minute - scfm)	4,641	4,580	4,540	4,587
Stack Flowrate, (dry standard cubic feet per minute - dscfm)	4,067	3,950	3,950	3,989
Isokinetics, Percent	**100.1**	**98.3**	**97.5**	**98.6**