WHEELABRATOR NORTH ANDOVER
A WIN-WASTE INNOVATIONS COMPANY
DRAFT - COMPLIANCE SUMMARY REPORT

Wheelabrator TECHNOLOGIES

WIN WASTE INNOVATIONS
PERFORMANCE FOR THE PLANET

Date 10/28/24
NOTE: Emission & Process results may change after Startup, Shutdown, Malfunction data validation

Plant Wheelabrator North Andover
Unit Unit 1
Source Outlet

Date	Hour	On-Line Minutes	O2		NOx		SO2						CO				Carbon Feed		FF Temp (deg F)		Steam KLbs/Hr	
			Out Vol % Dry	Status	Outlet ppm 7%O2	Status	Outlet ppm 7%O2	Status	Inlet ppm 7%O2	Status	Removal	Status	Outlet ppm 7%O2	Status	4 Hr Block	Status	Lbs/Hr Avg.	8 Hr Block	1 Hr Avg.	4 Hr Block	1 Hr Avg.	4 Hr Block
10/28/2024	0	60	10.8		142		12		60		80		1				15		309		164.9	
10/28/2024	1	60	10.6		139		17		56		70		0				15		309		167.0	
10/28/2024	2	60	10.7		144		17		56		69		0				14		310		165.6	
10/28/2024	3	60	10.6		138		13		59		78		1		0		15		309	309	167.8	166.3
10/28/2024	4	60	10.6		143		14		78		82		1				14		310		165.7	
10/28/2024	5	60	10.6		140		12		43		72		2				14		309		167.1	
10/28/2024	6	60	10.6		142		11		37		71		2				14		310		167.2	
10/28/2024	7	60	10.5		142		10		32		69		2		2		16	15	309	310	168.1	167.0
10/28/2024	8	60	10.7		139		1		23		97		2				24		309		168.0	
10/28/2024	9	60	10.7		141		8		34		75		2				16		309		168.3	
10/28/2024	10	60	10.8		141		7		30		76		2				15		309		167.2	
10/28/2024	11	60	10.5		143		0		20		97		2		2		13		310	309	164.1	166.9
10/28/2024	12	60	10.5		139		0		18		98		2				17		309		167.5	
10/28/2024	13	60	10.6		142		0		15		98		2				16		310		165.6	
10/28/2024	14	60	10.5		142		1		16		95		2				19		310		166.6	
10/28/2024	15	60	10.5		142		2		17		87		3		2		18	17	310	310	161.5	165.3
10/28/2024	16	60	10.5		138		7		18		61		2				17		309		167.5	
10/28/2024	17	60	10.7		142		9		36		74		3				17		309		168.4	
10/28/2024	18	60	10.5		141		11		37		72		2				15		310		168.9	
10/28/2024	19	60	10.6		141		7		29		77		2		2		16		309	309	167.9	168.2
10/28/2024	20	60	10.6		140		1		22		96		2				14		309		167.4	
10/28/2024	21	60	10.7		141		3		26		89		2				14		310		166.0	
10/28/2024	22	60	10.7		139		8		24		65		2				15		309		169.2	
10/28/2024	23	60	10.9		142		18		38		52		1		2		14	15	309	309	166.7	167.3
Average:					141										see above				see above	see above	see above	
Geometric Mean Average:							5				85											
Limit:					≤ 150 24-HR Block Avg.		≤ 29 24-HR Geometric Mean		OR		≥ 80% Removal Efficiency				≤ 69 ppmc 4-HR Block Average		≥ 12 lb/hr 8-HR. Block Average		≤ 345 °F 4-HR Block Average		≤ 173 klb/hr 4-HR Block Average	

Status Flags

I - Invalid
B - Bad
C - Calibration
M - Maintenance
F - Offline
P - Purge
T - Out of Control
E - Excluded
^ - Startup
* - Shutdown

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PERFORMANCE FOR THE PLANET

Date 10/28/24

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Plant Wheelabrator North Andover
Unit Unit 2
Source Outlet

Date	Hour	On-Line Minutes	O2		NOx		SO2						CO				Carbon Feed		FF Temp (deg F)		Steam KLbs/Hr	
			Out Vol % Dry	Status	Outlet ppm 7%O2	Status	Outlet ppm 7%O2	Status	Inlet ppm 7%O2	Status	Removal	Status	Outlet ppm 7%O2	Status	4 Hr Block	Status	Lbs/Hr Avg.	8 Hr Block	1 Hr Avg.	4 Hr Block	1 Hr Avg.	4 Hr Block
10/28/2024	0	60	10.9		140		0		68		99		3				14		310		167.1	
10/28/2024	1	60	10.9		140		4		82		95		2				14		310		167.0	
10/28/2024	2	60	10.9		141		18		107		83		3				13		310		166.6	
10/28/2024	3	60	10.9		138		19		115		83		3		3		14		310	310	167.4	167.0
10/28/2024	4	60	11.0		141		13		99		87		5				14		310		168.2	
10/28/2024	5	60	11.1		139		2		55		96		4				14		310		166.5	
10/28/2024	6	60	11.0		141		0		45		99		4				13		310		167.4	
10/28/2024	7	60	11.1		139		0		51		100		3		4		15	14	310	310	167.7	167.4
10/28/2024	8	60	11.4		139		0		39		100		3				24		310		167.6	
10/28/2024	9	60	11.4		139		0		37		100		3				10		310		168.7	
10/28/2024	10	60	11.3		140		5		69		92		4				14		310		166.8	
10/28/2024	11	60	11.1		140		0		54		100		4		4		13		310	310	166.8	167.5
10/28/2024	12	60	10.9		140		0		41		100		3				13		310		168.0	
10/28/2024	13	60	10.9		139		0		36		100		4				10		310		168.0	
10/28/2024	14	60	10.9		141		0		39		100		4				23		310		164.7	
10/28/2024	15	60	10.6		140		0		37		100		4		4		15	15	310	310	167.6	167.1
10/28/2024	16	60	10.8		139		2		49		96		4				15		310		165.7	
10/28/2024	17	60	11.0		140		5		73		93		5				14		310		167.9	
10/28/2024	18	60	10.8		139		0		62		99		4				13		310		167.9	
10/28/2024	19	60	11.1		138		0		45		100		4		4		13		309	310	162.7	166.0
10/28/2024	20	60	10.8		142		0		43		100		4				14		311		167.4	
10/28/2024	21	60	11.0		139		0		53		100		4				14		310		166.8	
10/28/2024	22	60	11.2		137		0		50		100		4				14		310		168.4	
10/28/2024	23	60	11.3		140		2		66		97		3		4		14	14	310	310	165.4	167.0
Average:					140										see above		see above		see above	see above	see above	
Geometric Mean Average:							0															
Limit:					≤ 150 24-HR Block Avg.		≤ 29 24-HR Geometric Mean		OR		≥ 80% Removal Efficiency				≤ 69 ppmc 4-HR Block Average		≥ 12 lb/hr 8-HR. Block Average		≤ 345 °F 4-HR Block Average		≤ 173 klb/hr 4-HR Block Average	

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WHEELABRATOR NORTH ANDOVER
A WIN-WASTE INNOVATIONS COMPANY
OPACITY REPORT

Date 28-Oct-2024

Plant Wheelabrator North Andover
Unit **Unit 1**
Source Outlet

Opacity is a measure of how much soot or smoke may be contained in stack emissions. The more smoke that is contained in the emissions the higher the level of opacity. Continuous opacity monitors located after all of the air pollution control equipment measure the opacity of the emissions from each boiler. Typically the human eye can not detect or see smoke that is less than 5% opacity. You won't see smoke from a modern trash-to-energy plant although in colder weather you will see water vapor condensation, similar to seeing your breath on a cold day. This is not considered opacity. We have a permit limit established by the Massachusetts Department of Environmental Protection of 10% opacity averaged every six (6) minutes.

Limit 10 %

Time (hr)	1-6 min		7-12 min		13-18 min	19-24 min	25-30 min	31-36 min	37-42 min	43-48 min	49-54 min	55-60 min	Average
0	1		1		1	1	1	1	1	1	1	1	1
1	1		1		1	1	2	1	1	1	1	1	1
2	1		1		1	1	1	2	1	2	2	2	1
3	1		1		1	2	1	1	1	1	1	1	1
4	1		2		1	1	1	1	1	1	2	1	1
5	2		2		1	2	2	2	1	2	2	2	1
6	2	IC	6	IC	2	2	2	2	2	2	2	2	2
7	2		2		2	2	2	2	2	1	1	2	1
8	1		1		1	2	2	2	2	2	2	2	1
9	2		2		2	2	2	2	2	2	2	2	2
10	2		2		2	2	2	2	2	2	2	2	2
11	2		2		2	2	1	2	2	2	2	2	2
12	2		2		2	2	2	2	2	2	2	2	2
13	2		2		2	2	2	2	2	2	2	2	2
14	2		2		2	2	2	2	2	2	2	2	2
15	2		1		2	2	2	2	2	2	2	2	1
16	2		2		2	2	2	2	2	1	1	2	1
17	1		1		1	1	1	1	1	1	2	1	1
18	1		2		2	2	2	2	2	1	2	2	1
19	1		1		2	1	2	1	1	1	1	1	1
20	1		1		1	1	1	2	1	1	1	2	1
21	1		1		1	1	1	1	1	1	2	1	1
22	1		1		1	1	1	1	1	1	2	1	1
23	1		1		1	1	2	2	1	2	2	2	1

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Limit 10 %

Time (hr)	1-6 min		7-12 min		13-18 min	19-24 min	25-30 min	31-36 min	37-42 min	43-48 min	49-54 min	55-60 min	Average
0	2		2		2	2	2	2	2	2	2	2	2
1	2		2		2	2	2	2	2	2	2	2	2
2	2		2		2	2	2	2	2	2	2	2	2
3	2		2		2	2	2	2	2	2	2	2	2
4	2		2		2	2	2	2	2	2	2	2	2
5	2		2		2	2	2	2	2	2	2	2	2
6	1	IC	6	IC	2	2	2	2	2	2	2	2	2
7	2		2		2	2	2	2	2	2	2	2	2
8	2		2		2	2	2	2	2	2	2	2	2
9	2		2		2	2	2	2	2	2	2	2	2
10	2		2		2	2	2	2	2	2	2	2	2
11	2		2		2	2	2	2	2	2	2	2	2
12	2		2		2	2	2	2	2	2	2	2	2
13	2		2		2	2	2	2	2	2	2	2	2
14	2		2		2	2	2	2	2	2	2	2	2
15	2		2		2	2	2	2	2	2	2	2	2
16	2		2		2	2	2	2	2	2	2	2	2
17	2		2		2	2	2	2	2	2	2	2	2
18	2		2		2	2	2	2	2	2	2	2	2
19	2		2		2	2	2	2	2	2	2	2	2
20	2		2		2	2	2	2	2	2	2	2	2
21	2		2		2	2	2	2	2	2	2	2	2
22	2		2		2	2	2	2	2	2	2	2	2
23	2		2		2	2	2	2	2	2	2	2	2

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