



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



Date 9/4/24

Plant Wheelabrator North Andover

NOTE: Emission & Process results may change after Startup, Shutdown, Malfunction data validation

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.
9/4/2024	0	58	11.5		143		16		71		78		1			14		309		168.5	
9/4/2024	1	60	11.6		140		12		63		80		1			14		310		165.6	
9/4/2024	2	60	11.5		141		11		65		82		0			14		309		166.5	
9/4/2024	3	60	11.5		141		12		67		82		1	0		14		309	309	166.4	166.8
9/4/2024	4	60	11.5		141		23		59		61		1			14		310		167.4	
9/4/2024	5	60	11.7		138		6		90		94		1			13		309		168.0	
9/4/2024	6	60	11.6		143		1		36		97		1			13		309		162.3	
9/4/2024	7	60	11.6		140		3		35		91		1	1		13	14	309	309	167.9	166.4
9/4/2024	8	60	11.8		141		3		52		95		0			14		309		168.8	
9/4/2024	9	60	11.9		142		1		43		99		0			14		310		166.2	
9/4/2024	10	60	11.8		142		1		63	IBCM	99	IBCM	1			13		310		166.3	
9/4/2024	11	60	11.7		138		2		51	IBCM	96	IBCM	0	0		13		309	310	169.3	167.7
9/4/2024	12	60	11.6		143		4		51		92		1			13		309		167.8	
9/4/2024	13	60	11.6		138		3		47		93		3			13		307		154.9	
9/4/2024	14	60	11.3		142		1		37		98		0			13		311		162.8	
9/4/2024	15	60	11.1		143		1		34		98		0	1		13	13	310	309	166.9	163.1
9/4/2024	16	60	11.2		139		13		71		82		0			14		308		167.4	
9/4/2024	17	60	11.3		141		9		59		84		0			14		309		168.7	
9/4/2024	18	60	11.2		142		18		82		79		0			15		310		168.3	
9/4/2024	19	60	11.3		141		11		61		83		0	0		13		309	309	167.5	168.0
9/4/2024	20	60	11.2		142		7		51		85		0			13		310		167.6	
9/4/2024	21	60	11.2		140		7		57		87		0			14		309		166.9	
9/4/2024	22	60	11.0		142		6		53		88		0			13		309		167.5	
9/4/2024	23	60	11.1		139		8		52		85		0	0		13	14	309	309	168.2	167.5

Average: Geometric Mean Average:	141	5	OR	90	see above	see above	see above	see above
Limit:	≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean		≥ 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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Date 9/4/24

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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.
9/4/2024	0	58	10.8		139		2		52		97		6			16		310		168.0	
9/4/2024	1	60	10.8		140		2		56		96		5			15		310		166.6	
9/4/2024	2	60	10.9		139		1		47		97		5			15		310		168.4	
9/4/2024	3	60	10.9		139		0		48		99		5	5		14		310	310	167.5	167.6
9/4/2024	4	60	11.1		143		1		44		98		6			14		310		166.8	
9/4/2024	5	60	11.1		138		1		183		99		5			14		310		168.3	
9/4/2024	6	60	11.0		141		0		58		100		5			14		310		167.3	
9/4/2024	7	60	11.2		139		0		17		100		5	5		14	14	310	310	167.2	167.4
9/4/2024	8	60	11.1		140		0		23		100		5			14		310		167.8	
9/4/2024	9	60	11.0		139		1		56		98		7			14		310		166.6	
9/4/2024	10	60	10.7		136		9		93	IBCM	90	IBCM	7			14		310		167.3	
9/4/2024	11	60	10.8		139		1		32	IBCM	98	IBCM	6	6		14		309	310	166.7	167.1
9/4/2024	12	60	10.7		141		0		37		100		5			14		310		165.0	
9/4/2024	13	60	10.7		139		0		38		100		5			14		310		167.6	
9/4/2024	14	60	10.8		138		7		72		90		5			13		310		164.7	
9/4/2024	15	60	10.8		141		0		46		100		5	5		14	14	310	310	167.9	166.3
9/4/2024	16	60	10.8		140		1		55		98		5			14		310		167.0	
9/4/2024	17	60	10.6		138		0		46		99		4			14		310		169.2	
9/4/2024	18	60	10.7		138		4		66		94		5			14		310		167.0	
9/4/2024	19	60	10.7		140		2		56		96		5	5		14		310	310	168.3	167.9
9/4/2024	20	60	10.9		140		0		46		100		5			14		310		168.0	
9/4/2024	21	60	10.9		135		15		83		82		101			14		310		166.1	
9/4/2024	22	60	10.8		141		10		76		86		5			14		310		167.1	
9/4/2024	23	60	10.7		139		7		66		90		5	29		14	14	310	310	167.8	167.2

Average: Geometric Mean Average:	139	1	OR	99	see above	see above	see above	
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 04-Sep-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	2	I	2	I	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
3	2		2		2	2	2	2	2	2	2
4	2		2		2	2	2	2	2	2	2
5	2		2		2	2	2	2	2	2	2
6	2	IC	6	IC	2	2	2	2	2	2	2
7	2		2		2	2	2	2	2	2	2
8	2		2		2	2	2	2	2	2	2
9	2		2		2	2	2	2	2	2	2
10	2		2		2	2	2	2	2	2	2
11	2		2		2	2	2	2	2	2	2
12	2		2		2	2	2	2	2	2	2
13	2		2		2	2	2	2	2	2	2
14	2		2		2	2	2	2	2	2	2
15	2		2		2	2	2	2	2	2	2
16	2		2		2	2	2	2	2	2	2
17	2		2		2	2	2	2	2	2	2
18	2		2		2	2	2	2	2	2	2
19	2		2		2	2	2	2	2	2	2
20	2		2		2	2	2	2	2	2	2
21	2		2		2	2	2	2	2	2	2
22	2		2		2	2	2	2	2	2	2
23	2		2		2	2	2	2	2	2	2

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Date 04-Sep-2024

Plant Wheelabrator North Andover
Unit Unit 2
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	2	I	2	I	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
3	2		2		2	2	2	2	2	2	2
4	2		2		2	2	2	2	2	2	2
5	2		2		2	2	2	2	2	2	2
6	1	IC	6	IC	2	2	2	2	2	2	2
7	2		2		2	2	2	2	2	2	2
8	2		2		2	2	2	2	2	2	2
9	2		2		2	2	2	2	2	2	2
10	2		2		2	2	2	2	2	2	2
11	2		2		2	2	2	2	2	2	2
12	2		2		2	2	2	2	2	2	2
13	2		2		2	2	2	2	2	2	2
14	2		2		2	2	2	2	2	2	2
15	2		2		2	2	2	2	2	2	2
16	2		2		2	2	2	2	2	2	2
17	2		2		2	2	2	2	2	2	2
18	2		2		2	2	2	2	2	2	2
19	2		2		2	2	2	2	2	2	2
20	2		2		2	2	2	2	2	2	2
21	2		2		2	2	2	2	2	2	2
22	2		2		2	2	2	2	2	2	2
23	2		2		2	2	2	2	2	2	2

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