



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



Date 7/12/24

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.
7/12/2024	0	58	10.6		141		2		31		95		0			14		309		169.7	
7/12/2024	1	60	10.7		142		4		31		86		0			15		309		167.8	
7/12/2024	2	60	10.8		140		4		33		88		0			15		309		166.4	
7/12/2024	3	60	10.7		139		7		36		81		0	0		16		310	309	167.3	167.8
7/12/2024	4	60	10.8		141		1		27		98		0			18		310		166.4	
7/12/2024	5	60	10.7		145		9		39		76		0			18		310		168.9	
7/12/2024	6	60	10.6		137		5		36		87		0			17		309		165.8	
7/12/2024	7	60	10.9		142		14		58		76		1	0		15	16	309	309	165.1	166.6
7/12/2024	8	60	10.7		143		6	IBM	62	IBM	90	IBM	1			14		310		169.1	
7/12/2024	9	60	10.9		137		27		93		71		1			13		312		166.6	
7/12/2024	10	60	11.0		143		11		54		79		1			14		307		169.0	
7/12/2024	11	60	11.1		140		8		41		80		1	1		13		309	309	167.9	168.1
7/12/2024	12	60	10.8		143		4		35		89		1			14		310		166.6	
7/12/2024	13	60	10.7		138		6		44		87		0			14		308		166.0	
7/12/2024	14	60	10.9		140		9		53		83		1			13		309		162.1	
7/12/2024	15	60	10.8		143		11		56		81		0	1		14	14	310	310	167.6	165.6
7/12/2024	16	60	10.8		140		3		43		93		0			13		309		168.1	
7/12/2024	17	60	11.1		140		17		82		79		0			14		309		167.3	
7/12/2024	18	60	11.0		142		19		63		70		0			14		310		166.4	
7/12/2024	19	60	10.9		143		24		90		73		0	0		14		310	309	168.0	167.4
7/12/2024	20	60	10.9		140		23		90		74		0			14		310		166.6	
7/12/2024	21	60	10.9		141		19		73		74		0			14		309		167.3	
7/12/2024	22	60	11.1		139		18		71		75		0			14		309		164.3	
7/12/2024	23	60	10.8		143		18		71		74		0	0		13	14	310	309	167.6	166.4

Average:
Geometric Mean Average:

Limit:

141	8	OR	84
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean		≥ 80% Removal Efficiency

see above
≤ 69 ppmc 4-HR Block Average

see above	see above	see above
≥ 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 7/12/24

Plant Wheelabrator North Andover

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

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.
7/12/2024	0	58	9.4		140		0		17		100		5			14		310		166.8	
7/12/2024	1	60	9.5		140		0		22		100		5			14		310		168.2	
7/12/2024	2	60	9.5		140		1		23		98		5			14		310		167.7	
7/12/2024	3	60	9.7		137		0		16		100		5	5		14		309	310	161.4	166.0
7/12/2024	4	60	9.6		141		0		27		99		6			9		311		167.0	
7/12/2024	5	60	9.7		138		2		26		93		5			18		310		166.9	
7/12/2024	6	60	9.7		141		0		16		100		5			17		310		166.2	
7/12/2024	7	60	9.8		138		19		66	IBM	71	IBM	6	6		15	14	310	310	167.5	166.9
7/12/2024	8	60	9.6		140		8		93	IBM	91	IBM	6			14		310		167.1	
7/12/2024	9	60	9.6		140		28		102		72		7			14		310		167.0	
7/12/2024	10	60	9.9		139		27		89		70		6			14		310		168.1	
7/12/2024	11	60	9.6		139		1		35		97		5	6		13		310	310	168.0	167.5
7/12/2024	12	60	9.8		140		3		40		91		6			13		310		167.5	
7/12/2024	13	60	9.6		140		4		40		91		6			13		310		167.9	
7/12/2024	14	60	9.8		139		9		61		84		5			14		310		167.0	
7/12/2024	15	60	9.5		139		8		39		80		6	6		14	13	310	310	168.8	167.8
7/12/2024	16	60	9.6		140		1		25		97		6			13		310		166.8	
7/12/2024	17	60	9.5		139		4		35		90		5			14		310		168.1	
7/12/2024	18	60	9.4		139		6		39		84		6			14		310		167.9	
7/12/2024	19	60	9.5		140		12		50		76		5	5		14		310	310	165.9	167.2
7/12/2024	20	60	9.6		140		20		77		74		5			14		310		167.9	
7/12/2024	21	60	9.7		138		17		65		73		5			14		310		169.1	
7/12/2024	22	60	9.7		140		6		48		87		4			14		310		167.2	
7/12/2024	23	60	9.6		140		12		66		82		5	5		14	14	310	310	166.4	167.6

Average:	139	3	95			
Geometric Mean Average:						
Limit:	≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean	OR	≥ 80% Removal Efficiency	see above ≤ 69 ppmc 4-HR Block Average	see above ≥ 12 lb/hr 8-HR. Block Average
					see above ≤ 345 °F 4-HR Block Average	see above ≤ 173 klb/hr 4-HR Block Average

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 12-Jul-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	I	I	1	1	1	1	1	1	1	1
1	1			1	1	1	1	1	1	1	1
2	1			1	1	1	1	1	1	1	1
3	1			1	1	1	1	1	1	1	1
4	1			1	1	1	1	1	1	1	1
5	1			1	1	1	1	1	1	1	1
6	2	IC	5	IC	1	1	1	1	1	1	2
7	1			1	1	1	1	1	1	1	1
8	1			1	1	1	1	1	1	1	1
9	1			1	1	1	1	1	1	1	1
10	1			1	1	1	1	1	1	1	1
11	1			1	1	1	1	1	1	1	1
12	1			1	1	1	1	1	1	1	1
13	1			1	1	1	1	1	1	1	1
14	1			1	1	1	1	1	1	1	1
15	1			1	1	1	1	1	1	1	1
16	1			1	1	1	1	1	1	1	1
17	1			1	1	1	1	1	1	1	1
18	1			1	1	1	1	1	1	1	1
19	1			1	1	1	1	1	1	1	1
20	1			1	1	1	1	1	1	1	1
21	1			1	1	1	1	1	1	1	1
22	1			1	1	1	1	1	1	1	1
23	1			1	1	1	1	1	1	1	1

Status Flags

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



WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 12-Jul-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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 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown