



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



Date 4/23/24

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.
4/23/2024	0	60	10.7		142		0		89		100		2			13		298		164.2	
4/23/2024	1	60	10.5		141		5		94		95		1			12		303		165.1	
4/23/2024	2	60	10.6		142		20		107		81		0			12		309		167.9	
4/23/2024	3	60	10.7		139		21		111		81		1	1		12		307	304	166.7	166.0
4/23/2024	4	60	10.5		145		19		105		82		1			12		309		165.3	
4/23/2024	5	60	10.6		142		19		93		80		1			13		316		168.2	
4/23/2024	6	60	10.8		139		18		86		79		1			12		316		167.1	
4/23/2024	7	60	10.6		141		23		112		80		1	1		12	12	313	313	168.5	167.3
4/23/2024	8	60	10.9		138		13		85		85		2			12		307		169.4	
4/23/2024	9	60	11.0		142		11		89		87		2			13		298		167.2	
4/23/2024	10	60	11.1		142		19		83		77		1			13		302		166.6	
4/23/2024	11	60	11.4		139		15		79		80		4	2		13		306	303	167.0	167.6
4/23/2024	12	60	11.1		144		12		79		85		24			13		306		167.5	
4/23/2024	13	60	10.8		139		14		81		83		1			13		306		166.4	
4/23/2024	14	60	10.6		141		13		71		82		1			13		310		166.4	
4/23/2024	15	60	10.6		141		8		66		87		1	7		13	13	307	307	167.2	166.9
4/23/2024	16	60	10.8		142		6		97		93		1			12		297		166.6	
4/23/2024	17	60	10.7		140		28		139		80		1			13		301		166.8	
4/23/2024	18	60	10.7		142		20		103		81		0			14		302		167.2	
4/23/2024	19	60	10.6		140		22		93		77		1	1		14		308	302	168.7	167.3
4/23/2024	20	60	10.8		140		22		89		75		0			13		308		167.0	
4/23/2024	21	60	10.6		142		19		85		78		0			13		308		168.6	
4/23/2024	22	60	10.8		142		22		90		76		1			13		305		166.5	
4/23/2024	23	60	10.8		139		21		92		77		1	1		13	13	303	306	166.3	167.1

Average: Geometric Mean Average:	141	14	OR	85	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 4/23/24

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.
4/23/2024	0	60	10.2		141		1		32		97		6			12		310		167.1	
4/23/2024	1	60	10.0		137		3		41		93		6			14		310		166.9	
4/23/2024	2	60	10.1		141		6		45		87		5			16		310		167.6	
4/23/2024	3	60	10.2		140		15		55		73		5	5		16		310	310	167.7	167.3
4/23/2024	4	60	10.4		139		10		60		82		16			15		310		166.5	
4/23/2024	5	60	10.2		142		9		52		82		5			14		310		168.3	
4/23/2024	6	60	10.3		139		6		41		84		6			14		310		166.7	
4/23/2024	7	60	10.3		139		1		21		95		7	9		14	14	310	310	166.6	167.0
4/23/2024	8	60	10.4		138		5		27		80		7			13		310		168.4	
4/23/2024	9	60	10.2		142		6		29		79		7			12		310		167.5	
4/23/2024	10	60	10.2		139		7		30		77		6			12		310		167.7	
4/23/2024	11	60	10.0		140		4		29		85		7	7		11		310	310	167.5	167.8
4/23/2024	12	60	9.9		139		0		19		100		8			11		310		167.1	
4/23/2024	13	60	9.9		140		0		18		100		6			11		310		167.8	
4/23/2024	14	60	9.8		141		0		27		99		7			12		310		168.1	
4/23/2024	15	60	10.1		139		0		19		100		6	7		12	12	310	310	166.3	167.3
4/23/2024	16	60	10.0		141		18		61		70		6			14		310		166.5	
4/23/2024	17	60	10.1		138		21		59		64		6			14		310		167.4	
4/23/2024	18	60	9.8		141		3		33		92		6			14		310		167.8	
4/23/2024	19	60	9.8		138		1		24		96		7	6		14		310	310	167.9	167.4
4/23/2024	20	60	10.1		140		6		33		81		6			14		310		167.9	
4/23/2024	21	60	10.3		140		13		38		65		6			14		310		167.6	
4/23/2024	22	60	10.1		142		11		38		71		7			14		310		167.8	
4/23/2024	23	60	10.2		138		11		32		65		8	7		14	14	310	310	167.4	167.7

Average:
Geometric Mean Average:

Limit:

140	3
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

92
≥ 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 23-Apr-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	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	0	IC	4	IC	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0

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 23-Apr-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	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
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	1	1	1	1	1	1
13	2	2	2	1	1	1	2	1	2	2	1
14	2	2	2	2	1	1	1	1	1	1	1
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	1	1	2	2	1	2	2	1
19	2	2	1	1	1	1	2	2	2	1	1
20	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	1	2	1
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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