



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



Date 8/1/24

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.
8/1/2024	0	58	10.8		138		9		33		72		1			17		305		167.5	
8/1/2024	1	60	10.7		141		4		29		85		0			18		304		166.5	
8/1/2024	2	60	10.8		141		16		36		55		0			8		307		166.2	
8/1/2024	3	60	10.5		141		8		31		75		0	0		15		309	306	164.9	166.3
8/1/2024	4	60	10.4		151		4		30		88		0			11		310		165.8	
8/1/2024	5	60	10.6		138		8		37		78		1			17		309		166.5	
8/1/2024	6	60	10.3		144		1		28		96		1			15		310		163.7	
8/1/2024	7	60	10.5		139		3		27		89		2	1		16	15	308	309	167.1	165.8
8/1/2024	8	60	10.6		141		12		32		64		1			14		309		166.9	
8/1/2024	9	60	10.7		137		18		37		52		2			14		310		169.2	
8/1/2024	10	60	10.6		140		14		46		69		1			14		308		165.8	
8/1/2024	11	60	10.1		142		12		36		66		1	1		14		311	309	168.0	167.5
8/1/2024	12	60	9.9		140		14		37		62		2			14		310		169.0	
8/1/2024	13	60	10.3		142		14		32		57		1			15		310		167.8	
8/1/2024	14	60	10.5		143		11		24		55		1			11		310		166.7	
8/1/2024	15	60	10.0		138		6		26		77		3	2		19	15	310	310	166.0	167.3
8/1/2024	16	60	10.1		138		18		38		53		72			18		309		171.7	
8/1/2024	17	60	10.0		144		8		30		72		2			16		310		167.2	
8/1/2024	18	60	10.3		137		13		31		59		1			19		309		168.3	
8/1/2024	19	60	10.0		142		14		31		54		1	19		16		310	309	165.8	168.2
8/1/2024	20	60	10.0		141		17		30		43		0			17		309		167.0	
8/1/2024	21	60	9.9		139		16		32		50		0			18		309		166.6	
8/1/2024	22	60	9.8		141		9		29		70		1			18		309		164.6	
8/1/2024	23	60	10.1		143		16		41		62		0	0		17	17	308	309	166.3	166.1

Average:
Geometric Mean Average:

Limit:

141	9	OR	71
≤ 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 8/1/24

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.
8/1/2024	0	58	10.6		137		0		40		100		7			14		310		165.5	
8/1/2024	1	60	10.6		140		0		32		100		6			14		310		164.3	
8/1/2024	2	60	10.6		140		0		41		98		6			15		310		167.7	
8/1/2024	3	60	10.5		138		0		43		100		6	6		15		310	310	167.6	166.3
8/1/2024	4	60	10.6		142		0		37		100		6			15		310		167.0	
8/1/2024	5	60	10.7		139		0		41		100		7			15		310		167.3	
8/1/2024	6	60	10.7		140		0		23		100		7			13		310		159.6	
8/1/2024	7	60	10.5		140		0		21		100		6	6		15	14	310	310	168.5	165.6
8/1/2024	8	60	10.5		139		0		30		100		7			15		310		167.2	
8/1/2024	9	60	10.5		140		0		20		100		7			15		310		166.5	
8/1/2024	10	60	10.8		140		0		22		100		7			14		310		166.5	
8/1/2024	11	60	10.3		140		0		22		100		6	7		15		310	310	167.9	167.0
8/1/2024	12	60	10.2		139		0		18		100		7			15		310		166.6	
8/1/2024	13	60	10.3		141		0		12		100		6			14		310		166.4	
8/1/2024	14	60	10.3		139		0		15		100		7			14		310		167.5	
8/1/2024	15	60	10.5		140		0		17		100		7	7		13	14	311	310	166.6	166.8
8/1/2024	16	60	10.0		140		0		16		100		7			14		310		167.4	
8/1/2024	17	60	10.1		139		0		18		100		6			13		310		167.0	
8/1/2024	18	60	10.2		141		0		23		100		6			13		310		167.7	
8/1/2024	19	60	10.4		140		0		21		100		5	6		15		309	310	167.3	167.4
8/1/2024	20	60	10.3		136		1		31		98		6			14		310		166.8	
8/1/2024	21	60	10.2		141		1		31		97		6			14		310		167.5	
8/1/2024	22	60	10.2		139		0		24		100		6			14		310		167.5	
8/1/2024	23	60	10.6		140		0		22		98		6	6		13	14	310	310	167.2	167.2

Average: Geometric Mean Average:	140	0	OR	100	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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 01-Aug-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	1
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

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 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown



WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 01-Aug-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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