



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



Date 5/12/24

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.
5/12/2024	0	60	10.2		141		19		66		72		0			13		309		168.3	
5/12/2024	1	60	10.2		140		21		73		71		0			13		310		166.6	
5/12/2024	2	60	10.3		141		20		75		74		0			13		309		166.1	
5/12/2024	3	60	10.2		141		24		82		70		0		0		13	309	309	167.0	167.0
5/12/2024	4	60	10.5		144		12		59		79		0			13		309		161.2	
5/12/2024	5	60	10.4		141		20		73		72		0			13		310		167.4	
5/12/2024	6	60	10.5		140		23		85		73		0			13		309		166.6	
5/12/2024	7	60	10.5		140		20		80		75		0		0	13	13	309	309	167.5	165.7
5/12/2024	8	60	10.5		143		18		79		77		0			13		309		167.5	
5/12/2024	9	60	10.5		142		21		62		66		0			13		310		167.8	
5/12/2024	10	60	10.5		139		21		75		71		0			13		309		166.6	
5/12/2024	11	60	10.4		142		17		65		74		0		0	13		310	309	167.7	167.4
5/12/2024	12	60	10.5		140		16		55		71		0			13		309		166.0	
5/12/2024	13	60	10.3		142		18		50		64		0			13		310		168.3	
5/12/2024	14	60	10.4		140		19		51		62		0			13		309		166.9	
5/12/2024	15	60	10.4		142		21		67		68		0		0	13	13	309	309	165.3	166.6
5/12/2024	16	60	10.4		141		18		58		69		0			13		309		169.6	
5/12/2024	17	60	10.5		140		21		64		67		0			13		309		166.9	
5/12/2024	18	60	10.5		141		20		48		59		0			13		309		166.9	
5/12/2024	19	60	10.5		142		23		70		67		0		0	13		310	309	167.1	167.6
5/12/2024	20	60	10.4		141		23		67		66		0			13		310		167.5	
5/12/2024	21	60	10.4		140		17		51		67		0			13		309		167.2	
5/12/2024	22	60	10.3		142		8		43		81		0			13		309		165.9	
5/12/2024	23	60	10.3		141		11		47		77		0		0	13	13	309	309	166.6	166.8

Average:
Geometric Mean Average:

Limit:

141	18
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

71
≥ 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

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 5/12/24

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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.
5/12/2024	0	60	9.4		139		20		40		49		5			14		310		167.3	
5/12/2024	1	60	9.4		139		17		31		45		5			13		310		166.2	
5/12/2024	2	60	9.3		140		24		35		33		5			13		310		168.0	
5/12/2024	3	60	9.9		140		9		31		71		5	5		13		310	310	167.3	167.2
5/12/2024	4	60	10.1		138		23		38		39		5			13		310		163.8	
5/12/2024	5	60	10.1		140		35		46		23		8			13		310		167.6	
5/12/2024	6	60	9.9		138		34		69		51		8			13		309		168.7	
5/12/2024	7	60	9.9		140		14		41		66		6	7		13	13	310	310	166.4	166.6
5/12/2024	8	60	9.5		137		23		42		45		6			13		310		167.7	
5/12/2024	9	60	9.3		139		17		41		59		5			14		310		167.9	
5/12/2024	10	60	9.3		139		24		64		63		5			14		310		166.6	
5/12/2024	11	60	9.3		140		10		31		66		4	5		15		310	310	168.0	167.6
5/12/2024	12	60	9.4		140		9		27		67		4			13		310		165.9	
5/12/2024	13	60	9.1		139		11		33		67		4			13		310		166.8	
5/12/2024	14	60	9.1		140		16		32		49		4			14		310		167.4	
5/12/2024	15	60	9.3		140		21		28		24		4	4		14	14	310	310	165.6	166.4
5/12/2024	16	60	9.0		139		15		28		44		4			14		310		167.6	
5/12/2024	17	60	9.1		140		19		24		22		4			14		310		167.3	
5/12/2024	18	60	9.1		140		24		29		18		5			14		310		167.2	
5/12/2024	19	60	9.2		139		36		47		23		6	5		14		310	310	167.0	167.3
5/12/2024	20	60	9.1		140		23		34		33		5			14		310		167.2	
5/12/2024	21	60	9.2		140		27		37		27		4			14		310		167.9	
5/12/2024	22	60	9.2		138		19		33		44		4			14		310		166.8	
5/12/2024	23	60	9.3		140		13		30		58		4	4		14	14	310	310	167.6	167.4

Average: Geometric Mean Average:	139	19	OR	48	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 12-May-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

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Date 12-May-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	1	1	2	2	2	2	2	2	2	1
1	2	2	2	2	2	1	2	2	2	1	1
2	2	2	2	2	1	1	1	1	1	1	1
3	1	2	2	2	2	2	1	1	2	2	1
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	2	2	2	2	2	2
13	2	2	1	1	2	2	2	2	2	2	1
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	1	2	1	2	2	2	2	2	2	2	1
20	2	1	2	2	1	2	2	2	2	2	1
21	2	2	2	1	1	1	1	2	2	1	1
22	2	2	2	2	2	2	2	2	1	2	1
23	2	2	2	2	2	2	2	1	2	2	2

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