



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



Date 3/26/24

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.
3/26/2024	0	60	10.6		141		16		19		17		1			13		310		159.6	
3/26/2024	1	60	10.5		142		15		7		0		1			13		310		165.2	
3/26/2024	2	60	10.6		141		21		18		0		0			13		309		168.3	
3/26/2024	3	60	10.5		142		19		33		41		0	1		13		310	310	167.3	165.1
3/26/2024	4	60	10.5		145		17		17		0		0			13		309		166.5	
3/26/2024	5	60	10.5		141		20		22		9		0			13		309		166.2	
3/26/2024	6	60	10.7		140		20		31		36		0			13		309		164.8	
3/26/2024	7	60	10.5		144		17		36		54		1	0		12	13	309	309	165.5	165.7
3/26/2024	8	60	10.7		138		18		25		26		1			13		308		166.9	
3/26/2024	9	60	10.6		142		19		36		48		1			13		310		167.3	
3/26/2024	10	60	10.6		140		15		20		26		1			13		309		166.0	
3/26/2024	11	60	10.5		138		16		37		57		5	2		13		309	309	160.7	165.2
3/26/2024	12	60	10.7		144		23		29		20		0			13		310		163.2	
3/26/2024	13	60	10.6		142		27		24		0		1			13		310		166.9	
3/26/2024	14	60	10.6		141		18		22		19		1			13		309		167.8	
3/26/2024	15	60	10.6		139		20		25		18		2	1		13	13	309	309	168.9	166.7
3/26/2024	16	60	10.7		142		19		40		53		2			13		309		167.3	
3/26/2024	17	60	10.7		142		21		44		53		1			13		309		166.5	
3/26/2024	18	60	10.6		142		20		48		58		1			13		309		166.0	
3/26/2024	19	60	10.5		140		20		29		33		1	1		14		309	309	167.8	166.9
3/26/2024	20	60	10.7		140		18		22		18		0			13		309		167.6	
3/26/2024	21	60	10.8		140		5		14		67		0			13		309		167.2	
3/26/2024	22	60	10.7		142		19		48		61		1			13		310		167.4	
3/26/2024	23	60	10.6		139		14		42		67		1	1		13	13	309	309	169.4	167.9

Average: Geometric Mean Average:	141	18	OR	34	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 3/26/24

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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.
3/26/2024	0	60	8.8		139		3		29		89		5			13		310		157.9	
3/26/2024	1	60	9.0		139		0		11		100		6			14		310		157.0	
3/26/2024	2	60	8.6		142		0		33		99		5			14		310		167.8	
3/26/2024	3	60	8.3		137		3		39		93		4	5		14		310	310	167.3	162.5
3/26/2024	4	60	8.7		140		0		34		100		5			13		310		164.8	
3/26/2024	5	60	8.5		140		1		30		96		5			14		310		167.8	
3/26/2024	6	60	8.5		138		0		21		99		5			14		310		167.7	
3/26/2024	7	60	8.5		142		1		16		97		6	5		14	14	310	310	165.8	166.5
3/26/2024	8	60	8.5		139		0		27		100		6			14		310		167.0	
3/26/2024	9	60	8.6		138		0		27		100		6			14		310		167.3	
3/26/2024	10	60	8.5		139		2		50		95		7			14		310		168.1	
3/26/2024	11	60	8.1		142		2		40		95		6	6		13		310	310	165.3	166.9
3/26/2024	12	60	8.3		140		0		28		100		5			14		309		165.5	
3/26/2024	13	60	8.3		140		0		27		100		6			14		310		167.2	
3/26/2024	14	60	8.2		140		0		27		100		6			14		310		166.2	
3/26/2024	15	60	8.3		138		0		37		99		14	8		13	14	310	310	163.6	165.6
3/26/2024	16	60	7.9		140		2		56		97		6			13		311		167.8	
3/26/2024	17	60	8.0		140		7		68		89		6			13		309		166.2	
3/26/2024	18	60	7.9		141		3		57		94		5			14		310		167.8	
3/26/2024	19	60	8.0		139		0		39		100		5	6		14		310	310	167.4	167.3
3/26/2024	20	60	8.2		139		9		47		81		5			14		310		167.7	
3/26/2024	21	60	8.4		139		7		43		84		5			13		310		167.4	
3/26/2024	22	60	8.2		139		0		56		100		5			14		310		167.3	
3/26/2024	23	60	8.1		140		0		50		99		5	5		13	14	310	310	167.7	167.5

Average: Geometric Mean Average:	140	0	99	OR	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 26-Mar-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	1	IC	4	IC	0	0	0	0	0	0	1
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 26-Mar-2024

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

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