



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



Date 5/5/24

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.
5/5/2024	0	60	10.8		142		20		88		78		0			13		309		165.5	
5/5/2024	1	60	10.6		140		23		94		75		44			13		310		167.9	
5/5/2024	2	60	10.7		140		13		61		78		0			13		309		164.1	
5/5/2024	3	60	10.7		142		19		83		77		0	11		13		309	309	167.5	166.3
5/5/2024	4	60	10.7		141		21		93		77		0			13		310		167.2	
5/5/2024	5	60	10.5		141		16		67		76		0			13		309		168.0	
5/5/2024	6	60	10.4		141		17		59		71		0			13		309		165.5	
5/5/2024	7	60	10.2		138		10		62		83		0	0		13	13	309	309	170.1	167.7
5/5/2024	8	60	10.6		141		13		50		74		0			13		309		165.8	
5/5/2024	9	60	10.3		142		9		48		81		0			13		310		164.4	
5/5/2024	10	60	10.6		141		14		52		73		0			13		309		165.8	
5/5/2024	11	60	9.9		141		4		62		93		21	5		13		310	310	161.0	164.3
5/5/2024	12	60	10.5		138		13		69		81		0			13		308		166.5	
5/5/2024	13	60	10.3		140		9		56		83		0			13		310		166.5	
5/5/2024	14	60	10.3		140		8		48		83		0			13		308		165.6	
5/5/2024	15	60	10.6		144		10		57		83		8	2		13	13	310	309	158.4	164.2
5/5/2024	16	60	10.4		143		17		80		78		0			13		309		167.4	
5/5/2024	17	60	10.4		140		21		87		76		0			13		309		168.8	
5/5/2024	18	60	10.4		141		17		73		76		0			13		309		166.4	
5/5/2024	19	60	10.4		141		15		78		81		0	0		13		310	309	162.8	166.3
5/5/2024	20	60	10.4		140		18		75		76		0			13		309		168.2	
5/5/2024	21	60	10.5		142		16		68		76		0			13		309		169.0	
5/5/2024	22	60	10.6		140		33		119		72		1			13		309		165.4	
5/5/2024	23	60	10.2		141		21		80		74		0	0		13	13	309	309	168.3	167.7

Average: Geometric Mean Average:	141	15	OR	79	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 5/5/24

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.
5/5/2024	0	60	10.1		141		5		53		91		6			14		310		167.4	
5/5/2024	1	60	10.1		138		1		45		97		6			14		310		166.5	
5/5/2024	2	60	9.9		139		10		62		84		5			14		310		167.5	
5/5/2024	3	60	10.2		140		12		59		80		5	6		14		310	310	167.6	167.2
5/5/2024	4	60	10.3		141		12		54		77		5			13		310		167.5	
5/5/2024	5	60	10.1		140		10		46		79		5			13		310		166.6	
5/5/2024	6	60	10.1		140		0		35		99		5			13		310		167.2	
5/5/2024	7	60	10.0		140		1		30		96		5	5		13	13	310	310	167.7	167.2
5/5/2024	8	60	9.9		139		0		25		100		4			13		310		167.5	
5/5/2024	9	60	9.8		139		0		30		100		5			13		310		168.5	
5/5/2024	10	60	9.9		139		0		21		100		4			13		310		166.4	
5/5/2024	11	60	9.8		141		0		26		100		4	4		14		310	310	166.9	167.3
5/5/2024	12	60	9.8		140		0		31		100		5			13		310		167.0	
5/5/2024	13	60	9.9		139		1		34		97		4			14		310		167.7	
5/5/2024	14	60	9.8		140		2		29		94		5			14		310		167.7	
5/5/2024	15	60	10.0		139		12		29		59		4	5		13	13	310	310	165.2	166.9
5/5/2024	16	60	10.0		140		28		49		43		4			13		310		167.4	
5/5/2024	17	60	10.1		139		30		56		46		6			13		310		168.6	
5/5/2024	18	60	10.1		140		16		35		55		5			13		310		167.9	
5/5/2024	19	60	10.0		140		10		39		74		5	5		13		310	310	167.2	167.8
5/5/2024	20	60	10.0		140		14		51		73		4			14		310		167.4	
5/5/2024	21	60	10.2		139		14		61		76		5			13		310		166.9	
5/5/2024	22	60	10.1		140		19		73		74		4			13		310		167.2	
5/5/2024	23	60	10.0		140		13		58		77		4	4		13	13	310	310	168.6	167.5

Average:
Geometric Mean Average:

Limit:

140	2	OR	95
≤ 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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 05-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 05-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	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	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2
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	2	2	2	2	2	2	2	2	2	2	2
20	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	2	2	2
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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