



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



Date 10/26/24

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.
10/26/2024	0	60	10.7		141		14		56		75		1			19		309		168.1	
10/26/2024	1	60	10.7		140		12		74		84		1			17		309		167.6	
10/26/2024	2	60	10.8		141		13		66		80		1			16		309		166.5	
10/26/2024	3	60	10.7		140		14		47		71		1	1		15		309	309	169.3	167.9
10/26/2024	4	60	10.7		141		15		53		72		1			15		310		166.6	
10/26/2024	5	60	10.7		143		19		82		77		1			15		310		165.0	
10/26/2024	6	60	10.6		140		17		77		78		2			15		309		166.0	
10/26/2024	7	60	10.4		139		17		47		65		2	1		14	16	310	310	166.6	166.1
10/26/2024	8	60	10.5		143		15		45		67		1			15		310		168.7	
10/26/2024	9	60	10.8		138		18		53		67		1			14		309		166.2	
10/26/2024	10	60	10.7		143		15		73		79		1			14		309		166.7	
10/26/2024	11	60	10.8		140		18		73		75		2	1		12		309	309	167.1	167.2
10/26/2024	12	60	10.6		142		17		75		77		1			12		310		167.6	
10/26/2024	13	60	10.7		141		16		57		72		1			11		310		167.1	
10/26/2024	14	60	10.6		141		16		52		70		1			13		309		166.1	
10/26/2024	15	60	10.7		140		15		49		69		1	1		13	13	309	309	166.4	166.8
10/26/2024	16	60	10.8		142		16		64		74		0			12		309		165.2	
10/26/2024	17	60	10.6		141		19		73		74		0			14		310		167.0	
10/26/2024	18	60	10.8		141		20		74		73		0			15		309		167.7	
10/26/2024	19	60	10.8		140		18		59		69		0	0		14		309	309	166.9	166.7
10/26/2024	20	60	10.8		142		17		53		68		0			14		310		166.8	
10/26/2024	21	60	10.7		142		16		56		71		0			14		309		166.9	
10/26/2024	22	60	10.6		139		15		45		66		0			16		310		167.4	
10/26/2024	23	60	10.7		142		15		45		66		0	0		18	15	309	309	167.3	167.1

Average: Geometric Mean Average:	141	16	OR	73	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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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.
10/26/2024	0	60	10.9		139		6		66		90		4			15		311		168.0	
10/26/2024	1	60	11.0		139		3		69		95		4			15		310		167.5	
10/26/2024	2	60	10.8		140		0		64		99		4			15		310		166.8	
10/26/2024	3	60	10.9		138		1		63		98		4	4		15		310	310	168.4	167.7
10/26/2024	4	60	10.9		142		19		98		81		5			15		310		167.3	
10/26/2024	5	60	10.9		137		28		141		80		6			14		310		167.9	
10/26/2024	6	60	11.2		138		16		85		81		3			15		310		168.7	
10/26/2024	7	60	11.0		139		15		88		82		5	5		14	15	310	310	167.9	168.0
10/26/2024	8	60	10.8		142		4		65		94		5			14		310		166.5	
10/26/2024	9	60	10.7		138		11		85		86		5			16		310		168.2	
10/26/2024	10	60	10.8		140		22		115		81		5			13		310		167.7	
10/26/2024	11	60	11.0		140		16		94		83		4	5		13		310	310	166.6	167.2
10/26/2024	12	60	10.9		139		19		99		81		9			14		310		166.7	
10/26/2024	13	60	10.7		141		17		99		82		7			14		310		167.4	
10/26/2024	14	60	10.9		138		21		103		80		9			13		310		167.8	
10/26/2024	15	60	10.7		139		15		90		84		9	9		14	14	310	310	167.3	167.3
10/26/2024	16	60	10.9		141		20		96		80		6			14		310		165.5	
10/26/2024	17	60	10.8		139		21		97		79		3			13		310		167.4	
10/26/2024	18	60	10.9		141		24		107		77		3			13		310		167.8	
10/26/2024	19	60	11.0		137		20		96		79		3	4		14		310	310	167.3	167.0
10/26/2024	20	60	11.0		141		20		94		79		3			14		310		167.9	
10/26/2024	21	60	11.0		140		16		98		84		2			14		310		167.6	
10/26/2024	22	60	10.9		139		9		88		89		3			13		310		168.3	
10/26/2024	23	60	10.9		140		3		80		97		3	3		14	14	310	310	167.4	167.8

Average: Geometric Mean Average:	139	11	OR	88	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 26-Oct-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	2	2	2	1	1	1	1	1	1	1	1
1	2	1	2	1	1	2	1	2	1	2	1
2	2	2	2	2	1	2	1	2	2	2	1
3	2	2	1	2	2	2	1	1	1	2	1
4	1	2	1	1	1	1	1	1	1	1	1
5	1	1	1	2	2	1	1	1	1	1	1
6	2	IC	6	IC	2	1	2	2	2	2	2
7	2		2	2	2	2	2	2	2	2	2
8	2		2	2	2	2	2	2	2	2	2
9	2		2	2	2	2	2	2	2	2	2
10	2		2	2	2	2	2	2	2	2	2
11	2		2	2	2	1	2	2	1	2	1
12	1		1	1	2	2	2	2	2	2	1
13	2		2	2	2	2	2	2	2	2	2
14	2		2	2	2	2	2	2	2	2	2
15	2		2	2	2	2	1	1	2	1	1
16	2		1	1	1	1	1	2	1	1	1
17	1		1	1	1	2	1	1	1	2	1
18	1		1	1	1	1	1	1	1	1	1
19	2		2	2	2	2	1	2	2	2	1
20	2		2	2	1	1	1	1	1	1	1
21	1		1	1	1	1	1	1	1	1	1
22	1		1	1	1	1	1	1	1	1	1
23	1		2	2	2	2	2	2	2	2	1

Status Flags

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 26-Oct-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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