



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



Date 2/10/24

Wheel Plant Wheelabrator North Andover
Unit 1 Unit Unit 1
Outlet 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.
2/10/2024	0	60	10.7		142		21		27		22		0			14		309		166.4	
2/10/2024	1	60	10.5		143		23		25		10		1			13		310		165.6	
2/10/2024	2	60	10.5		140		22		39		43		1			13		310		166.9	
2/10/2024	3	60	10.4		144		22		36		38		0	1		13		309	309	168.3	166.8
2/10/2024	4	60	10.6		144		19		32		39		1			13		309		168.0	
2/10/2024	5	60	10.7		142		20		33		40		1			13		309		165.5	
2/10/2024	6	60	10.5		146		17		26		35		0			13		310		168.5	
2/10/2024	7	60	11.1		134		14		22		38		0	1		13	13	309	309	165.8	166.9
2/10/2024	8	60	10.9		146		28		66		57		2			13		310		167.8	
2/10/2024	9	60	10.9		141		34		109		69		1			12		309		167.6	
2/10/2024	10	60	11.2		139		73		208		65		0			13		309		167.8	
2/10/2024	11	60	11.1		141		31		121		74		1	1		13		309	309	165.1	167.1
2/10/2024	12	60	10.9		143		23		82		72		0			13		310		167.3	
2/10/2024	13	60	10.9		137		29		108		73		1			13		310		166.9	
2/10/2024	14	60	10.8		139		49		191		74		1			13		309		168.3	
2/10/2024	15	60	10.6		141		26		117		77		1	1		13	13	309	309	166.5	167.3
2/10/2024	16	60	10.4		141		18		94		81		1			13		309		168.8	
2/10/2024	17	60	10.7		142		17		83		80		2			13		309		166.5	
2/10/2024	18	60	10.7		144		20		93		79		1			13		310		166.8	
2/10/2024	19	60	10.7		137		17		81		80		1	1		14		310	309	165.9	167.0
2/10/2024	20	60	10.6		144		14		65		79		1			13		309		167.7	
2/10/2024	21	60	10.7		138		14		66		79		1			13		309		166.7	
2/10/2024	22	60	10.7		141		14		79		82		1			13		310		167.4	
2/10/2024	23	60	10.6		142		14		75		82		0	1		13	13	309	309	167.8	167.4

Average:
Geometric Mean Average:

Limit:

141	22
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

66
≥ 80% Removal Efficiency

see above
≤ 69 4-HR Block Average

ppmc

see above
≥ 12 8-HR. Block Average

lb/hr

see above
≤ 345 °F 4-HR Block Average

°F

see above
≤ 173 4-HR Block Average

klb/hr

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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Wheel Plant Wheelabrator North Andover
Unit 2 Unit Unit 1
Outlet 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.
2/10/2024	0	60	10.4		136		6		32		81		17			19		310		158.2	
2/10/2024	1	60	10.4		142		12		39		69		14			15		310		164.6	
2/10/2024	2	60	10.4		142		25		47		46		12			15		310		165.0	
2/10/2024	3	60	10.4		139		31		47		34		11	13		14		310	310	167.7	163.9
2/10/2024	4	60	10.5		145		25		44		44		11			13		310		167.6	
2/10/2024	5	60	10.5		139		19		44		56		11			13		310		166.7	
2/10/2024	6	60	10.3		143		11		35		67		10			14		310		168.4	
2/10/2024	7	60	10.5		137		9		31		70		8	10		14	14	310	310	167.4	167.5
2/10/2024	8	60	10.6		139		50		101		51		11			14		310		167.0	
2/10/2024	9	60	10.7		138		52		110		53		8			14		310		167.0	
2/10/2024	10	60	10.8		142		93		241		61		8			13		310		167.5	
2/10/2024	11	60	10.6		139		9		93		90		7	8		13		310	310	167.6	167.3
2/10/2024	12	60	10.4		142		9		80		89		8			14		310		167.5	
2/10/2024	13	60	10.4		136		25		137		82		7			13		310		167.6	
2/10/2024	14	60	10.2		139		35		172		80		10			13		310		168.2	
2/10/2024	15	60	10.2		140		21		108		81		8	8		12	13	310	310	167.3	167.6
2/10/2024	16	60	10.0		140		9		64		86		8			11		310		167.4	
2/10/2024	17	60	10.0		140		15		82		81		7			15		310		167.8	
2/10/2024	18	60	10.1		140		19		109		83		8			16		310		167.9	
2/10/2024	19	60	10.0		139		18		98		82		8	8		16		310	310	167.5	167.6
2/10/2024	20	60	10.2		138		18		93		81		7			16		310		166.9	
2/10/2024	21	60	10.2		142		13		80		84		7			16		310		166.8	
2/10/2024	22	60	10.2		139		12		81		86		7			14		310		167.1	
2/10/2024	23	60	10.2		141		13		87		85		6	7		13	15	310	310	168.0	167.2

Average:
Geometric Mean Average:

Limit:

140	18
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

76
≥ 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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 10-Feb-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	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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 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown



WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 10-Feb-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	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	1	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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