



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



Date 1/19/24

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.
1/19/2024	0	60	10.3		140		4		21		83		2			13		309		165.4	
1/19/2024	1	60	10.4		141		5		27		80		1			13		309		166.2	
1/19/2024	2	60	10.4		141		5		29		84		1			13		310		165.3	
1/19/2024	3	60	10.3		141		9		30		68		1	1		13		309	309	167.1	166.0
1/19/2024	4	60	10.3		144		4		23		84		1			13		310		165.7	
1/19/2024	5	60	10.3		141		1		20		96		1			13		309		166.9	
1/19/2024	6	60	10.3		141		4		21		83		1			13		310		166.4	
1/19/2024	7	60	9.8		140		9		31		71		1	1		13	13	308	309	166.9	166.5
1/19/2024	8	60	10.0		140		4		19		77		0			13		309		167.5	
1/19/2024	9	60	10.0		143		1		25		95		0			13		310		165.9	
1/19/2024	10	60	9.9		141		4		39		90		1			13		310		167.4	
1/19/2024	11	60	9.9		140		2		37		94		1	0		13		309	309	165.2	166.5
1/19/2024	12	60	9.6		138		3		36		92		1			13		309		166.3	
1/19/2024	13	60	10.3		140		4		26		85		0			12		310		166.7	
1/19/2024	14	60	10.0		142		4		26		86		0			12		310		166.6	
1/19/2024	15	60	9.9		143		1		17		95		0	0		13	13	310	310	163.0	165.6
1/19/2024	16	60	9.9		139		2		25		93		1			13		309		164.1	
1/19/2024	17	60	9.8		139		3		27		88		1			13		309		166.4	
1/19/2024	18	60	9.9		143		7		36		82		1			12		310		167.0	
1/19/2024	19	60	10.2		139		6		30		80		1	1		13		309	309	166.2	165.9
1/19/2024	20	60	9.9		141		9		33		71		1			13		310		165.6	
1/19/2024	21	60	10.0		142		5		24		78		1			13		310		165.4	
1/19/2024	22	60	10.0		140		4		26		84		1			13		310		166.5	
1/19/2024	23	60	10.0		141		8		30		73		1	1		13	13	309	310	168.5	166.5

Average:  
Geometric Mean Average:

Limit:

141	4
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

86
≥ 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.
1/19/2024	0	60	10.1		139		0		21		99		6			13		310		167.1	
1/19/2024	1	60	10.1		141		2		33		93		7			14		310		168.0	
1/19/2024	2	60	10.2		139		3		31		92		6			13		310		166.7	
1/19/2024	3	60	10.2		141		2		27		94		7	6		13		310	310	167.1	167.2
1/19/2024	4	60	10.0		141		4		28		85		7			13		310		167.4	
1/19/2024	5	60	10.1		139		4		28		84		6			13		310		167.6	
1/19/2024	6	60	10.3		140		6		28		77		7			14		310		167.9	
1/19/2024	7	60	10.2		139		7		28		74		6	6		14	14	310	310	167.8	167.7
1/19/2024	8	60	10.0		141		2		20		87		7			14		310		165.3	
1/19/2024	9	60	10.1		139		1		24		96		6			13		310		167.2	
1/19/2024	10	60	10.2		141		2		28		92		6			16		310		167.4	
1/19/2024	11	60	10.0		132		16		53		71		6	6		15		310	310	165.6	166.4
1/19/2024	12	59	9.9		140		7		44		84		4			13		310		167.3	
1/19/2024	13	60	9.8		141		4		43		90		5			13		310		167.9	
1/19/2024	14	60	9.9		139		4		40		91		5			13		310		165.6	
1/19/2024	15	60	9.9		140		2		29		91		4	5		13	14	310	310	167.0	166.9
1/19/2024	16	60	9.6		139		2		36		95		5			13		310		165.1	
1/19/2024	17	60	9.6		142		7		49		86		6			13		310		165.8	
1/19/2024	18	60	9.8		138		16		67		76		6			13		310		164.4	
1/19/2024	19	60	9.8		139		11		46		76		5	6		13		310	310	167.4	165.7
1/19/2024	20	60	9.7		140		12		52		77		5			13		310		167.8	
1/19/2024	21	60	9.9		140		5		38		86		5			13		310		167.1	
1/19/2024	22	60	10.1		139		7		43		83		5			13		310		166.3	
1/19/2024	23	60	9.9		141		6		44		85		5	5		13	13	310	310	168.1	167.3

Average:  
Geometric Mean Average:

Limit:

140	4
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89
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# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 19-Jan-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

**Status Flags**

I - Invalid                      C - Calibration                      F - Offline                      T - Out of Control                      ^ - Startup  
 B - Bad                            M - Maintenance                      P - Purge                      E - Excluded                      \* - Shutdown



# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 19-Jan-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	0	IBC	5	IBC	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	2	1	1	2	1	1	1
10	2	1	2	2	2	2	2	2	1	2	1
11	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	I	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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