



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



Date 5/31/24

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.
5/31/2024	0	60	9.9		142		19		51		62		1			13		309		166.3	
5/31/2024	1	60	10.3		140		20		46		56		0			13		309		166.8	
5/31/2024	2	60	10.2		142		21		54		61		0			12		309		166.1	
5/31/2024	3	60	10.2		141		20		50		61		0	0		12		310	309	166.9	166.5
5/31/2024	4	60	10.2		142		18		51		64		0			13		309		165.1	
5/31/2024	5	60	10.3		141		21		49		58		0			15		309		166.9	
5/31/2024	6	60	10.2		143		21		46		55		0			14		310		167.5	
5/31/2024	7	60	10.2		139		19		51		62		1	0		18	14	309	309	166.2	166.4
5/31/2024	8	60	10.2		142		16		46		64		0			14		309		166.6	
5/31/2024	9	60	10.3		142		22		46		52		1			12		310		168.3	
5/31/2024	10	60	10.6		141		21		57		64		0			15		309		166.1	
5/31/2024	11	60	10.7		138		17	IBM	4	IBM	0	IBM	1	1		13		309	309	165.1	166.5
5/31/2024	12	60	10.2		145		19		28		30		2			12		310		164.8	
5/31/2024	13	60	10.8		139		19		50		63		0			11		309		167.2	
5/31/2024	14	60	10.5		138		20		51		61		1			15		309		165.6	
5/31/2024	15	60	10.2		143		19		53		63		0	1		12	13	309	309	167.6	166.3
5/31/2024	16	60	10.5		142		20		56		65		0			13		309		165.1	
5/31/2024	17	60	10.6		138		22		65		66		0			16		309		163.3	
5/31/2024	18	60	10.4		142		22		63		65		0			16		309		165.6	
5/31/2024	19	60	10.4		144		22		55		60		0	0		14		310	309	167.3	165.3
5/31/2024	20	60	10.6		138		24		78		69		0			15		309		166.1	
5/31/2024	21	60	10.3		144		24		83		71		0			10		309		168.9	
5/31/2024	22	60	10.3		140		21		76		73		0			19		309		167.0	
5/31/2024	23	60	10.5		139		20		69		72		0	0		19	15	309	309	164.9	166.7

Average: Geometric Mean Average:	141	20	<b>OR</b>	62	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 5/31/24

Plant Wheelabrator North Andover

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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.
5/31/2024	0	60	9.7		140		8		31		75		9			14		310		167.5	
5/31/2024	1	60	10.1		140		13		33		61		5			14		310		166.6	
5/31/2024	2	60	9.9		140		20		45		56		5			14		310		167.8	
5/31/2024	3	60	9.8		140		22		41		46		5	6		14		310	310	167.6	167.4
5/31/2024	4	60	10.0		142		22		47		53		4			14		310		167.7	
5/31/2024	5	60	10.0		138		16		38		58		4			13		310		168.1	
5/31/2024	6	60	9.9		139		21		53		60		5			14		310		167.2	
5/31/2024	7	60	9.6		140		16		43		63		4	4		13	14	310	310	167.7	167.7
5/31/2024	8	60	9.7		139		7		27		74		5			14		310		167.0	
5/31/2024	9	60	9.7		141		25		56		56		5			14		310		168.0	
5/31/2024	10	60	9.6		139		28		71		60		6			14		310		167.6	
5/31/2024	11	60	9.7		135		18	IBM	3	IBM	0	IBM	4	5		14		309	310	167.6	167.6
5/31/2024	12	60	9.5		142		16		25		39		4			13		310		166.9	
5/31/2024	13	60	10.0		139		15		28		45		3			13		309		168.2	
5/31/2024	14	60	9.5		141		4		21		81		3			13		310		167.7	
5/31/2024	15	60	9.2		139		12		31		60		4	4		13	14	310	310	167.1	167.5
5/31/2024	16	60	9.4		140		10		25		62		4			13		310		164.7	
5/31/2024	17	60	9.2		139		13		26		52		4			11		310		167.2	
5/31/2024	18	60	9.3		139		13		26		50		4			15		310		167.5	
5/31/2024	19	60	9.5		140		19		30		35		4	4		16		310	310	168.1	166.9
5/31/2024	20	60	9.8		138		25		38		34		4			15		310		167.6	
5/31/2024	21	60	9.7		142		23		45		49		4			15		310		167.2	
5/31/2024	22	60	9.7		140		50		114		56		4			15		310		167.9	
5/31/2024	23	60	9.8		139		29		75		62		4	4		16	15	310	310	167.7	167.6

Average: Geometric Mean Average:	140	16	<b>OR</b>	58	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 31-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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# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 31-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	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	2	1	1	1	1
6	1	IC	6	IC	1	1	2	2	2	1	2
7	2	2	2	2	2	2	2	2	2	2	2
8	2	2	2	2	2	2	2	1	2	2	2
9	2	2	2	2	2	2	2	1	1	2	1
10	1	1	1	1	2	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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