



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



Date 4/29/24

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.
4/29/2024	0	60	10.7		143		16		90		82		0			13		309		162.1	
4/29/2024	1	60	10.6		142		22		105		79		0			13		309		168.8	
4/29/2024	2	60	10.7		140		20		100		79		2			13		309		167.1	
4/29/2024	3	60	10.7		141		21		96		78		0	1		13		309	309	167.8	166.5
4/29/2024	4	60	10.4		147		18		88		80		0			13		310		166.4	
4/29/2024	5	60	10.5		140		18		87		79		0			13		309		167.3	
4/29/2024	6	60	10.6		140		15		77		81		0			13		310		166.7	
4/29/2024	7	60	10.8		141		13		80		84		0	0		13	13	309	309	164.2	166.2
4/29/2024	8	60	10.7		143		25		130		80		1			13		310		165.4	
4/29/2024	9	60	10.6		141		10		88		88		1			13		309		167.9	
4/29/2024	10	60	10.9		142		45		92		51		0			13		309		167.8	
4/29/2024	11	60	10.8		140		24		80		70		0	0		13		309	309	167.0	167.0
4/29/2024	12	60	10.7		141		2		55		96		0			12		309		165.0	
4/29/2024	13	60	10.5		141		1		58		99		0			18		310		167.7	
4/29/2024	14	60	10.6		139		2		60		97		0			9		308		169.9	
4/29/2024	15	60	10.7		143		1		64		98		0	0		18	14	309	309	166.5	167.3
4/29/2024	16	60	10.7		140		4		70		94		0			18		309		168.5	
4/29/2024	17	60	10.6		143		4		68		94		0			14		309		168.3	
4/29/2024	18	60	10.7		140		0		62		100		0			14		310		166.2	
4/29/2024	19	60	10.7		141		2		68		97		0	0		15		310	309	168.4	167.9
4/29/2024	20	60	10.7		141		8		88		91		0			15		309		168.2	
4/29/2024	21	60	10.8		140		6		74		92		0			14		309		166.2	
4/29/2024	22	60	10.7		142		3		76		96		0			14		309		168.4	
4/29/2024	23	60	10.6		139		3		77		97		0	0		15	15	309	309	168.5	167.8

Average: Geometric Mean Average:	141	7	<b>OR</b>	92	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 4/29/24

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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.
4/29/2024	0	60	9.9		138		11		41		72		5			15		310		167.6	
4/29/2024	1	60	10.1		140		17		43		60		5			15		310		168.1	
4/29/2024	2	60	10.0		140		11		35		68		5			15		310		167.4	
4/29/2024	3	60	10.0		138		12		35		67		5	5		15		310	310	167.6	167.7
4/29/2024	4	60	9.8		144		6		32		80		5			15		310		166.1	
4/29/2024	5	60	9.8		139		3		22		85		5			15		310		166.5	
4/29/2024	6	60	9.7		139		1		10		94		6			15		310		167.2	
4/29/2024	7	60	9.9		140		0		11		99		6	6		15	15	309	310	167.2	166.7
4/29/2024	8	60	10.0		141		3		25		86		7			14		310		167.4	
4/29/2024	9	60	10.0		138		0		20		100		6			15		310		167.9	
4/29/2024	10	60	10.0		143		28		30		7		7			15		310		167.9	
4/29/2024	11	60	10.4		135		21		27		23		5	6		12		310	310	167.8	167.7
4/29/2024	12	60	10.0		142		4		21		81		5			6		310		167.2	
4/29/2024	13	60	9.9		139		0		23		100		6			23		310		167.0	
4/29/2024	14	60	10.3		139		0		21		98		5			16		310		167.8	
4/29/2024	15	60	10.0		141		0		18		100		7	6		16	15	310	310	166.5	167.1
4/29/2024	16	60	10.0		140		0		17		100		6			19		310		167.1	
4/29/2024	17	60	9.7		140		0		16		100		6			19		310		167.7	
4/29/2024	18	60	10.0		138		0		15		100		6			19		310		166.0	
4/29/2024	19	60	10.0		139		0		19		100		6	6		18		310	310	167.5	167.1
4/29/2024	20	60	10.1		141		0		18		100		6			17		310		167.4	
4/29/2024	21	60	10.2		139		0		28		100		6			16		310		165.7	
4/29/2024	22	60	10.1		140		0		30		100		6			12		310		167.6	
4/29/2024	23	60	10.0		140		0		28		100		6	6		15	17	310	310	166.9	166.9

Average: Geometric Mean Average:	140	1	<b>OR</b>	99	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 29-Apr-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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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	2	2	1	1	1	2	1
1	2	2	2	2	2	1	2	1	1	1	1
2	2	2	2	2	2	2	1	2	2	2	1
3	2	2	2	2	2	2	2	2	1	2	1
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
8	2		2		2	2	2	2	2	2	2
9	2		2		2	2	2	2	2	2	2
10	2		2		2	2	2	2	2	2	2
11	2		2		2	2	2	2	2	2	2
12	2		2		2	2	2	2	2	2	2
13	2		2		2	2	2	2	2	2	2
14	2		2		2	2	2	2	2	2	2
15	2		2		2	2	2	2	2	2	2
16	2		2		2	2	2	2	2	2	2
17	2		2		2	2	2	2	2	2	2
18	2		2		2	2	2	2	2	2	2
19	2		1		1	1	1	2	2	1	1
20	2		2		1	2	2	2	2	2	1
21	2		2		2	2	2	2	2	2	2
22	2		2		2	2	2	2	2	2	2
23	2		2		2	2	2	2	2	2	2

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