



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



Date 6/23/24

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.
6/23/2024	0	58	10.2		142		5		56		91		0			9		309		166.5	
6/23/2024	1	60	10.1		141		10		64		84		0			21		310		168.4	
6/23/2024	2	60	10.4		142		6		47		88		0			25		309		167.9	
6/23/2024	3	60	10.3		140		7		56		87		0	0		13		310	309	167.8	167.6
6/23/2024	4	60	10.3		140		4		46		90		0			13		309		167.3	
6/23/2024	5	60	10.1		142		5		45		89		0			21		310		168.8	
6/23/2024	6	60	10.1		138		4		43		90		0			19		309		168.5	
6/23/2024	7	60	9.9		141		8		45		83		0	0		17	17	309	309	168.9	168.4
6/23/2024	8	60	10.0		141		13		46		70		0			15		309		167.3	
6/23/2024	9	60	10.2		143		13		43		70		0			14		310		166.8	
6/23/2024	10	60	9.9		141		6		38		85		0			13		309		164.8	
6/23/2024	11	60	9.5		137		8		51		83		4	1		13		309	309	167.3	166.5
6/23/2024	12	60	10.3		140		11		58		81		0			13		309		167.2	
6/23/2024	13	60	10.2		142		11		45		76		0			13		310		164.8	
6/23/2024	14	60	10.2		141		8		45		81		0			13		309		165.0	
6/23/2024	15	60	10.4		139		13		49		74		0	0		13	13	309	309	161.0	164.5
6/23/2024	16	60	10.3		142		14		47		71		0			13		310		164.6	
6/23/2024	17	60	10.2		141		8		35		78		0			13		310		165.0	
6/23/2024	18	60	10.2		140		8		38		79		0			13		310		163.5	
6/23/2024	19	60	10.2		137		10		37		74		0	0		13		309	310	161.3	163.6
6/23/2024	20	60	10.2		143		16		48		66		0			13		310		164.8	
6/23/2024	21	60	10.2		141		20		63		68		0			13		309		164.0	
6/23/2024	22	60	10.2		141		17		55		69		0			13		310		164.2	
6/23/2024	23	60	10.0		143		9		49		81		0	0		13	13	308	309	167.6	165.1

Average: Geometric Mean Average:	141	9	OR	81	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 6/23/24

Plant Wheelabrator North Andover

NOTE: Emission & Process results may change after Startup, Shutdown, Malfunction data validation

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.
6/23/2024	0	58	9.5		139		5		47		89		4			16		310		167.1	
6/23/2024	1	60	9.4		141		1		38		98		4			14		310		166.9	
6/23/2024	2	60	9.6		138		1		35		96		4			15		310		168.5	
6/23/2024	3	60	9.5		139		10		58		83		4	4		14		310	310	167.8	167.6
6/23/2024	4	60	9.4		140		3		40		92		3			14		310		166.4	
6/23/2024	5	60	9.4		139		4		34		89		2			12		310		168.8	
6/23/2024	6	60	9.6		138		4		36		89		2			13		310		166.1	
6/23/2024	7	60	9.5		141		15		57		74		2	2		14	14	310	310	170.0	167.8
6/23/2024	8	60	9.5		138		9		47		81		2			14		310		167.3	
6/23/2024	9	60	9.8		134		3		36		92		5			14		309		157.5	
6/23/2024	10	60	9.3		140		5		35		87		2			14		311		167.9	
6/23/2024	11	60	9.2		139		6		33		82		2	3		14		310	310	167.3	165.0
6/23/2024	12	60	9.1		140		12		47		74		2			14		310		165.0	
6/23/2024	13	60	9.3		141		6		36		83		2			14		309		166.2	
6/23/2024	14	60	9.1		136		9		40		78		2			13		311		166.1	
6/23/2024	15	60	9.0		141		7		36		81		2	2		14	14	310	310	165.7	165.7
6/23/2024	16	60	9.1		140		13		45		72		1			14		309		165.5	
6/23/2024	17	60	9.1		142		7		41		83		2			14		310		165.8	
6/23/2024	18	60	9.3		140		8		35		76		2			14		311		163.2	
6/23/2024	19	60	9.4		139		8		32		76		2	2		14		310	310	164.1	164.7
6/23/2024	20	60	9.6		139		21		47		55		2			14		310		164.2	
6/23/2024	21	60	9.5		139		22		48		54		3			14		310		165.5	
6/23/2024	22	60	9.6		141		20		53		63		3			14		310		164.5	
6/23/2024	23	60	9.7		139		19		54		65		2	3		14	14	310	310	165.9	165.0

Average:
Geometric Mean Average:

Limit:

139	7
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

83
≥ 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

Status Flags

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 23-Jun-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	1	I	I	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
3	1			1	1	1	1	1	1	1	1
4	1			1	1	1	1	1	1	1	1
5	1			1	1	1	1	1	1	1	1
6	2	IC	5	IC	1	1	1	1	1	1	1
7	1			1	1	1	1	1	1	1	1
8	1			1	1	1	1	1	1	1	1
9	1			1	1	1	1	1	1	1	1
10	1			1	1	1	1	1	1	1	1
11	1			1	1	1	1	1	1	1	1
12	1			1	1	1	1	1	1	1	1
13	1			1	1	1	1	1	1	1	1
14	1			1	1	1	1	1	1	1	1
15	1			1	1	1	1	1	1	1	1
16	1			1	1	1	1	1	1	1	1
17	1			1	1	1	1	1	1	1	1
18	1			1	1	1	1	1	1	1	1
19	1			1	1	1	1	1	1	1	1
20	1			1	1	1	1	1	1	1	1
21	1			1	1	1	1	1	1	1	1
22	1			1	1	1	1	1	1	1	1
23	1			1	1	1	1	1	1	1	1

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 23-Jun-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	I	2	I	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
3	2		2		2	2	2	2	2	2	2
4	2		2		2	2	2	2	2	2	2
5	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		2		2	2	2	2	2	2	2
20	2		2		2	2	2	2	2	2	2
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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