



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



Date 6/17/24

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.
6/17/2024	0	58	10.4		138		13		55		77		0			17		309		166.4	
6/17/2024	1	60	10.3		141		11		50		78		0			17		310		165.9	
6/17/2024	2	60	10.6		140		17		59		70		0			17		309		166.8	
6/17/2024	3	60	10.6		142		21		62		65		0	0		16		310	309	168.0	166.8
6/17/2024	4	60	10.5		142		13		62		79		0			14		309		168.8	
6/17/2024	5	60	10.6		142		14		52		73		0			9		309		166.2	
6/17/2024	6	60	10.4		140		12		48		74		0			14		309		167.1	
6/17/2024	7	60	10.3		142		10		50		81		0	0		14	15	309	309	169.1	167.8
6/17/2024	8	60	10.6		141		13		56		78		0			14		309		167.3	
6/17/2024	9	60	10.4		140		1		36		97		0			14		309		166.3	
6/17/2024	10	60	10.5		142		6		46		87		0			14		310		168.4	
6/17/2024	11	60	10.6		142		9		51		82		0	0		14		310	309	166.7	167.2
6/17/2024	12	60	10.6		140		0		29		99		0			14		309		164.6	
6/17/2024	13	60	10.5		141		1		32		98		0			9		310		165.7	
6/17/2024	14	60	10.5		140		0		24		98		0			17		310		166.1	
6/17/2024	15	60	10.5		141		0		25		100		0	0		18	14	309	309	166.2	165.7
6/17/2024	16	60	10.3		141		0		28		99		0			18		309		167.8	
6/17/2024	17	60	10.6		141		19		79		76		0			16		309		167.3	
6/17/2024	18	60	10.6		142		14		53		74		0			17		309		166.8	
6/17/2024	19	60	10.6		139		7		38		83		0	0		15		309	309	167.0	167.2
6/17/2024	20	60	10.4		143		6		40		85		0			11		310		167.6	
6/17/2024	21	60	10.4		140		6		36		85		0			17		310		167.5	
6/17/2024	22	60	10.3		141		2		30		92		0			14		309		167.1	
6/17/2024	23	60	10.4		139		0		26		99		0	0		18	16	309	309	166.3	167.1

Average:
Geometric Mean Average:

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

92
≥ 80% Removal Efficiency

OR

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

- 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 6/17/24

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.
6/17/2024	0	58	9.7		139		4		45		90		3			13		310		166.6	
6/17/2024	1	60	9.5		139		9		53		83		3			14		311		167.6	
6/17/2024	2	60	9.7		139		11		50		78		3			13		310		167.7	
6/17/2024	3	60	9.9		137		6		44		86		3	3		13		309	310	168.0	167.5
6/17/2024	4	60	10.0		143		11		56		80		4			12		310		168.0	
6/17/2024	5	60	10.0		141		14		50		72		3			12		310		167.2	
6/17/2024	6	60	10.0		138		10		37		73		4			13		310		167.4	
6/17/2024	7	60	9.7		143		4		35		87		4	4		13	13	310	310	167.0	167.4
6/17/2024	8	60	10.0		137		3		32		89		5			13		310		165.6	
6/17/2024	9	60	10.2		139		0		34		99		5			13		310		168.1	
6/17/2024	10	60	9.9		139		1		45		98		5			13		310		166.5	
6/17/2024	11	60	9.5		141		0		26		100		4	5		13		310	310	166.6	166.7
6/17/2024	12	60	9.5		138		1		39		97		5			13		310		168.4	
6/17/2024	13	60	9.7		140		11		54		79		5			14		310		167.9	
6/17/2024	14	60	9.7		138		0		26		100		5			12		310		167.4	
6/17/2024	15	60	9.3		140		0		29		100		5	5		13	13	310	310	167.8	167.9
6/17/2024	16	60	9.6		139		3		34		92		5			13		310		167.0	
6/17/2024	17	60	9.6		141		22		67		67		4			12		310		167.7	
6/17/2024	18	60	9.7		141		17		52		68		4			13		310		167.5	
6/17/2024	19	60	9.7		137		5		36		86		4	4		13		310	310	167.5	167.4
6/17/2024	20	60	9.5		143		0		35		99		4			14		310		167.6	
6/17/2024	21	60	9.5		139		0		31		100		4			13		310		166.7	
6/17/2024	22	60	9.5		140		0		30		99		4			13		310		167.9	
6/17/2024	23	60	9.6		139		0		26		99		4	4		13	13	310	310	167.8	167.5

Average: Geometric Mean Average:	140	1	OR	96	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 17-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 17-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

Status Flags

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 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown