



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



Date 5/25/24

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.
5/25/2024	0	60	10.5		145		14		39		64		0			13		310		168.1	
5/25/2024	1	60	10.4		140		20		64		69		0			13		309		166.6	
5/25/2024	2	60	10.4		138		17		57		70		0			13		309		165.4	
5/25/2024	3	60	10.4		139		21		53		61		0	0		13		310	309	166.2	166.6
5/25/2024	4	60	10.5		137		22		64		66		0			13		309		167.4	
5/25/2024	5	60	10.3		142		17		57		69		0			13		309		166.4	
5/25/2024	6	60	10.4		140		59		73		19	1				12		309		165.5	
5/25/2024	7	60	10.4		142		21		108		81		0	0		15	13	310	309	167.4	166.7
5/25/2024	8	60	10.6		139		13		62		78		0			15		309		167.2	
5/25/2024	9	60	10.7		142		16		62		75	1				14		310		167.9	
5/25/2024	10	60	10.7		140		17		63		73	1				14		309		167.5	
5/25/2024	11	60	10.4		141		15		78		80		0	0		14		309	309	167.9	167.6
5/25/2024	12	60	10.3		142		16		64		75		0			14		310		169.0	
5/25/2024	13	60	10.5		139		14		53		74		0			14		309		167.0	
5/25/2024	14	60	10.4		142		16		66		76		0			14		309		167.1	
5/25/2024	15	60	10.5		141		13		59		78		0	0		14	14	309	309	164.4	166.9
5/25/2024	16	60	10.3		140		18		70		75		0			14		309		166.8	
5/25/2024	17	60	10.4		142		20		85		76		0			14		309		166.2	
5/25/2024	18	60	10.5		141		19		76		75		0			14		310		167.9	
5/25/2024	19	60	10.6		141		22		94		77		0	0		14		309	309	166.9	167.0
5/25/2024	20	60	10.4		141		19		87		78		0			13		310		167.7	
5/25/2024	21	60	10.5		141		21		85		76		0			13		310		168.0	
5/25/2024	22	60	10.4		141		21		78		73		0			13		309		167.1	
5/25/2024	23	60	10.3		142		20		75		74		0	0		13	13	310	309	167.8	167.7

Average:
Geometric Mean Average:

Limit:

141	19	OR	73	see above	see above	see above
≤ 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

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 5/25/24

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.
5/25/2024	0	60	10.3		143		18		45		61		5			15		310		167.3	
5/25/2024	1	60	10.3		140		16		38		58		6			15		310		167.7	
5/25/2024	2	60	10.3		137		3		29		88		5			15		310		165.7	
5/25/2024	3	60	10.3		142		7		35		81		6	6		14		310	310	168.4	167.3
5/25/2024	4	60	10.4		140		19		47		60		7			14		310		167.4	
5/25/2024	5	60	10.4		140		13		49		73		5			14		310		167.3	
5/25/2024	6	60	10.5		140		8		42		80		7			15		310		166.9	
5/25/2024	7	60	10.6		138		7		48		86		6	6		14	15	310	310	167.7	167.3
5/25/2024	8	60	10.8		140		2		44		96		6			15		310		167.6	
5/25/2024	9	60	10.7		141		6		56		89		6			15		310		167.1	
5/25/2024	10	60	10.8		138		3		42		93		6			15		310		166.9	
5/25/2024	11	60	10.4		142		10		57		82		6	6		14		310	310	168.2	167.4
5/25/2024	12	60	10.1		140		5		60		92		5			15		310		167.6	
5/25/2024	13	60	10.2		139		1		49		98		6			14		310		167.0	
5/25/2024	14	60	10.1		139		14		70		81		5			14		310		167.6	
5/25/2024	15	60	10.1		141		2		42		96		5	5		15	15	310	310	166.6	167.2
5/25/2024	16	60	10.1		139		2		46		95		5			14		310		166.8	
5/25/2024	17	60	10.2		140		8		51		84		5			15		310		167.2	
5/25/2024	18	60	10.2		140		9		51		83		5			14		310		168.2	
5/25/2024	19	60	10.1		138		20		67		71		5	5		15		310	310	167.1	167.3
5/25/2024	20	60	10.2		141		60		120		50		5			14		310		167.9	
5/25/2024	21	60	10.1		140		46		98		53		5			14		310		168.2	
5/25/2024	22	60	10.1		139		19		60		68		5			14		310		166.6	
5/25/2024	23	60	10.0		139		12		56		79		5	5		14	14	310	310	168.1	167.7

Average: Geometric Mean Average:	140	8	84	OR	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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 25-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

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 25-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	2	2	2	2	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	2	2	2	2
3	2	2	2	2	2	2	2	2	2	2	2
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	2	2
8	2	2	2	2	2	2	2	2	2	2	2
9	2	2	2	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2	2	2	2
12	2	2	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	2	2	2
17	2	2	2	2	2	2	2	2	2	2	2
18	2	2	2	2	2	2	2	2	2	2	2
19	2	2	2	2	2	2	2	2	2	2	2
20	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	2	2	2
22	2	2	2	2	2	2	2	2	2	2	2
23	2	2	2	2	2	2	2	2	2	2	2

Status Flags

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