



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



Date 7/25/24

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.
7/25/2024	0	58	10.7		142		17		48		64		1			13		308		167.2	
7/25/2024	1	60	10.8		140		31		61		50		0			14		309		167.4	
7/25/2024	2	60	10.8		140		34		63		46		0			13		309		166.0	
7/25/2024	3	60	10.7		142		35		65		46		0	0		13		309	309	167.0	166.9
7/25/2024	4	60	10.7		145		27		52		48		0			13		310		166.7	
7/25/2024	5	60	10.9		148		18		37		53		0			13		309		164.6	
7/25/2024	6	60	10.7		139		16		35		55		1			13		310		167.2	
7/25/2024	7	60	10.8		130		14		34		60		1	1		13	13	309	309	164.8	165.8
7/25/2024	8	60	10.9		129		16		35		56		1			13		309		168.2	
7/25/2024	9	60	11.0		134		12		42		71		0			14		309		164.7	
7/25/2024	10	60	10.8		131		16		39		59		1			15		310		167.3	
7/25/2024	11	60	10.8		130		28		44		35		1	1		14		310	310	167.2	166.9
7/25/2024	12	60	10.8		134		40		49		17		4			14		310		167.1	
7/25/2024	13	60	10.8		140		13		28		51		1			16		308		167.0	
7/25/2024	14	60	10.6		143		21		36		41		1			15		310		166.7	
7/25/2024	15	60	10.9		138		15		33		55		1	2		16	14	313	310	167.6	167.1
7/25/2024	16	60	10.8		143		9		27		68		1			17		310		166.1	
7/25/2024	17	60	11.0		145		25		42		41		0			13		310		167.7	
7/25/2024	18	60	11.1		140		14		39		63		1			15		309		166.8	
7/25/2024	19	60	10.9		141		15		39		62		1	1		14		309	310	168.0	167.2
7/25/2024	20	60	10.9		141		16		33		51		1			19		310		165.4	
7/25/2024	21	60	10.8		140		21		29		28		1			11		309		166.3	
7/25/2024	22	60	11.0		141		21		35		38		0			20		309		166.6	
7/25/2024	23	60	10.8		140		19		27		30		0	1		10	15	309	309	169.7	167.0

Average:
Geometric Mean Average:

Limit:

139	19
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

51
≥ 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

- 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 7/25/24

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.
7/25/2024	0	58	10.7		140		0		42		100		6			13		310		168.0	
7/25/2024	1	60	10.9		137		0		42		100		5			13		310		167.3	
7/25/2024	2	60	10.7		139		0		40		100		5			13		310		167.9	
7/25/2024	3	60	10.7		140		1		59		99		6	6		13		310	310	167.5	167.7
7/25/2024	4	60	10.6		142		3		61		95		6			14		310		166.3	
7/25/2024	5	60	10.8		140		4		43		91		5			13		310		167.5	
7/25/2024	6	60	10.8		139		0		24		100		5			14		310		165.9	
7/25/2024	7	60	11.1		136		2		32		94		47	16		14	13	310	310	168.4	167.0
7/25/2024	8	60	10.7		140		0		31		100		7			14		310		166.5	
7/25/2024	9	60	11.0		140		1		39		97		7			14		310		159.0	
7/25/2024	10	60	10.8		139		0		21		100		5			11		310		166.9	
7/25/2024	11	60	10.7		139		0		26		100		6	6		13		310	310	167.5	165.0
7/25/2024	12	60	10.5		140		0		31		100		6			16		310		168.1	
7/25/2024	13	60	10.4		137		0		23		100		6			17		310		167.5	
7/25/2024	14	60	10.4		143		0		33		100		6			15		310		167.2	
7/25/2024	15	60	10.5		138		1		39		98		7	6		18	15	310	310	167.2	167.5
7/25/2024	16	60	10.6		142		0		26		100		6			18		310		166.8	
7/25/2024	17	60	10.8		138		1		61		99		6			14		310		167.7	
7/25/2024	18	60	10.7		141		0		60		100		6			18		310		167.9	
7/25/2024	19	60	10.7		138		0		44		100		6	6		17		310	310	168.7	167.8
7/25/2024	20	60	10.8		140		0		43		100		6			15		310		168.2	
7/25/2024	21	60	10.8		140		0		38		100		6			19		310		167.7	
7/25/2024	22	60	11.1		139		0		38		100		6			13		310		166.5	
7/25/2024	23	60	11.0		140		0		33		100		6	6		15	16	310	310	168.5	167.7

Average: Geometric Mean Average:	139	0	OR	100	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 25-Jul-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 25-Jul-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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 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown