



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



Date 8/27/24

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 Hr Block
8/27/2024	0	58	11.2		144		15		68		77		0				16		310		166.5	
8/27/2024	1	60	11.1		140		17		78		78		1				15		310		167.8	
8/27/2024	2	60	11.2		140		20		79		74		1				14		309		166.5	
8/27/2024	3	60	11.3		139		16		63		74		0	0			14		309	309	165.5	166.6
8/27/2024	4	60	11.3		143		17		63		72		1				14		310		165.4	
8/27/2024	5	60	11.1		143		15		58		75		1				14		310		166.8	
8/27/2024	6	60	11.2		141		17		69		75		1				14		309		166.2	
8/27/2024	7	60	11.1		145		12		57		80		2	1			14	15	310	310	166.3	166.2
8/27/2024	8	60	11.3		138		16		62		74		1				14		309		169.1	
8/27/2024	9	60	11.4		142		10		50		81		1				14		310		167.7	
8/27/2024	10	60	11.3		144		12		55		77		1				14		310		168.2	
8/27/2024	11	60	11.4		139		14		58		76		1	1			14		309	309	167.1	168.0
8/27/2024	12	60	11.4		145		3		43		93		0				14		310		167.2	
8/27/2024	13	60	11.5		141		15		66		77		1				14		309		166.8	
8/27/2024	14	60	11.2		147		12		69		83		1				14		310		167.4	
8/27/2024	15	60	11.4		141		16		73		78		2	1			14	14	309	309	167.5	167.2
8/27/2024	16	60	11.4		142		12		77		85		1				14		309		167.9	
8/27/2024	17	60	11.3		142		13		76		83		0				14		310		165.8	
8/27/2024	18	60	11.3		144		16		85		81		0				14		309		168.8	
8/27/2024	19	60	11.3		146		18		87		79		0	0			14		310	309	168.1	167.7
8/27/2024	20	60	11.3		141		15		80		81		0				14		309		166.4	
8/27/2024	21	60	11.4		140		16		89		82		0				14		309		167.2	
8/27/2024	22	60	11.3		143		19		81		76		0				14		310		168.1	
8/27/2024	23	60	11.4		143		17		80		79		0	0			14	14	310	309	165.9	166.9

Average: Geometric Mean Average:	142	14	OR	79	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 8/27/24

Plant Wheelabrator North Andover

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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.
8/27/2024	0	58	11.3		140		6		59		89		5			14		313		167.6	
8/27/2024	1	60	11.2		141		9		59		85		5			14		316		167.8	
8/27/2024	2	60	11.3		137		10		60		84		6			15		316		167.1	
8/27/2024	3	60	11.4		139		3		55		95		5	5		12		313	315	167.0	167.4
8/27/2024	4	60	11.4		144		3		48		94		6			14		310		168.2	
8/27/2024	5	60	11.4		139		11		48		78		5			17		312		167.2	
8/27/2024	6	60	11.5		142		24		61		61		5			17		316		166.7	
8/27/2024	7	60	11.5		140		7		51		87		6	5		14	15	307	311	168.2	167.6
8/27/2024	8	60	11.7		138		8		49		83		5			17		308		167.8	
8/27/2024	9	60	11.6		142		0		35		99		6			16		305		167.3	
8/27/2024	10	60	11.3		137		0		34		100		5			15		311		168.4	
8/27/2024	11	60	11.8		139		0		35		100		5	5		17		306	308	166.4	167.5
8/27/2024	12	60	11.6		141		0		30		100		5			15		310		168.2	
8/27/2024	13	60	11.6		140		3		69		95		5			14		310		168.3	
8/27/2024	14	60	11.2		139		1		62		98		5			15		309		167.0	
8/27/2024	15	60	11.5		140		0		59		99		6	5		10	15	306	309	167.4	167.7
8/27/2024	16	60	11.6		137		6		86		93		5			13		301		166.8	
8/27/2024	17	60	11.5		143		0		55		99		5			13		306		167.2	
8/27/2024	18	60	11.6		136		3		66		95		6			14		312		167.0	
8/27/2024	19	60	11.4		141		2		76		97		6	5		14		311	307	168.2	167.3
8/27/2024	20	60	11.6		140		8		88		91		5			14		307		167.4	
8/27/2024	21	60	11.4		139		3		71		96		5			15		306		167.4	
8/27/2024	22	60	11.6		142		4		69		95		5			15		309		167.2	
8/27/2024	23	60	11.7		140		12		77		85		4	5		15	14	314	309	167.7	167.5

Average:	140	2	96	see above	see above	see above
Geometric Mean Average:						
Limit:	≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean	OR	≥ 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 27-Aug-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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 27-Aug-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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