



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



Date 7/10/24

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.
7/10/2024	0	58	10.6		142		6		32		82		0			14		309		166.5	
7/10/2024	1	60	10.7		140		9		34		73		0			13		309		169.2	
7/10/2024	2	60	10.6		140		12		37		67		0			13		309		167.1	
7/10/2024	3	60	10.6		144		17		37		55		0	0		13		310	309	167.6	167.6
7/10/2024	4	60	10.5		141		16		45		64		0			13		310		168.0	
7/10/2024	5	60	10.5		140		6		32		80		0			13		309		166.7	
7/10/2024	6	60	10.5		143		4		32		89		1			13		310		166.2	
7/10/2024	7	60	10.7		139		1		25		98		0	0		13	13	309	309	165.7	166.6
7/10/2024	8	60	10.8		140		0		27		100		0			14		309		167.5	
7/10/2024	9	60	11.4		134		0		25		100		1			13		308		165.7	
7/10/2024	10	60	11.0		143		8		38		78		1			13		311		165.7	
7/10/2024	11	60	11.0		142		11		44		74		2	1		13		310	309	165.7	166.1
7/10/2024	12	60	11.0		139		3		32		89		1			14		309		165.4	
7/10/2024	13	60	11.4		141		10		36		71		1			15		309		165.1	
7/10/2024	14	60	10.8		142		4		35		89		1			13		310		165.1	
7/10/2024	15	60	10.4		141		0		29		99		2	1		13	13	310	310	162.2	164.5
7/10/2024	16	60	10.6		142		2		36		94		0			13		309		167.3	
7/10/2024	17	60	10.6		139		6		66		90		1			13		309		163.0	
7/10/2024	18	60	10.4		141		9		65		87		0			13		309		166.5	
7/10/2024	19	60	10.7		141		4		52		92		0	0		13		310	309	165.5	165.6
7/10/2024	20	60	10.7		143		12		64		81		0			13		310		164.7	
7/10/2024	21	60	10.6		140		11		65		83		0			13		309		168.0	
7/10/2024	22	60	10.6		141		13		69		80		0			13		309		168.5	
7/10/2024	23	60	10.5		140		11		66		83		0	0		15	13	309	309	165.6	166.7

Average: Geometric Mean Average:	141	4	OR	90	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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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.
7/10/2024	0	58	9.3		139		1		23		94		4			13		310		167.7	
7/10/2024	1	60	9.3		140		5		28		84		4			14		310		167.5	
7/10/2024	2	60	9.2		141		8		33		75		4			14		310		168.2	
7/10/2024	3	60	9.3		137		9		37		75		4	4		14		310	310	168.8	168.0
7/10/2024	4	60	9.3		146		14		44		67		4			14		310		167.3	
7/10/2024	5	60	9.3		139		9		36		75		4			14		310		165.9	
7/10/2024	6	60	9.3		140		0		15		97		5			14		310		168.7	
7/10/2024	7	60	9.4		137		0		17		100		4	4		14	14	310	310	166.4	167.1
7/10/2024	8	60	9.6		140		0		22		98		5			14		310		165.8	
7/10/2024	9	60	9.8		140		8		28		72		5			14		310		162.5	
7/10/2024	10	60	9.7		142		10		27		62		5			14		311		166.4	
7/10/2024	11	60	9.5		138		11		39		73		6	5		14		310	310	165.0	164.9
7/10/2024	12	60	9.6		137		0		23		100		4			14		310		164.1	
7/10/2024	13	60	10.3		139		0		15		100		5			14		311		163.1	
7/10/2024	14	60	9.3		142		0		20		98		5			14		309		164.9	
7/10/2024	15	60	9.3		136		1		23		95		4	5		14	14	310	310	166.7	164.7
7/10/2024	16	60	9.0		139		35		121		71		6			12		310		165.9	
7/10/2024	17	60	9.0		142		55		181		70		6			13		310		165.6	
7/10/2024	18	60	9.1		139		3		40		93		5			14		310		164.7	
7/10/2024	19	60	9.2		140		2		44		96		5	5		13		310	310	165.7	165.5
7/10/2024	20	60	9.4		140		20		82		76		4			14		310		165.9	
7/10/2024	21	60	9.5		139		14		68		79		4			14		310		166.1	
7/10/2024	22	60	9.5		140		19		77		75		4			14		310		165.4	
7/10/2024	23	60	9.2		140		10		61		83		4	4		14	13	310	310	167.0	166.1

Average: Geometric Mean Average:	140	3	OR	93	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 10-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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 10-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