



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



Date 7/15/24

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.
7/15/2024	0	58	10.4		146		8		43		80		0			13		309		166.6	
7/15/2024	1	60	10.5		136		18		50		65		0			13		309		167.6	
7/15/2024	2	60	10.7		145		12		41		70		0			14		310		167.7	
7/15/2024	3	60	10.5		138		14		45		69		0	0		13		310	309	167.6	167.4
7/15/2024	4	60	10.6		141		13		51		75		0			13		309		167.8	
7/15/2024	5	60	11.0		136		6		38		86		4			13		307		155.3	
7/15/2024	6	60	10.5		146		1		26		97		0			13		312		163.1	
7/15/2024	7	60	10.8		139		1		20		96		1	1		13	13	309	309	165.8	163.0
7/15/2024	8	60	10.8		140		0		16		100		1			14		310		165.5	
7/15/2024	9	60	10.7		143		0		24		99		1			15		309		166.0	
7/15/2024	10	60	10.6		142		1		23		97		1			14		308		167.7	
7/15/2024	11	60	10.7		141		7		31		78		1	1		15		309	309	168.1	166.8
7/15/2024	12	60	10.6		143		8		36		78		1			14		310		163.6	
7/15/2024	13	60	10.9		141		5		25		80		1			14		309		167.6	
7/15/2024	14	60	10.8		140		5		24		81		0			14		309		166.1	
7/15/2024	15	60	10.4		142		3		20		87		0	0		14	14	310	310	166.6	166.0
7/15/2024	16	60	10.7		140		14		35		61		0			14		309		167.2	
7/15/2024	17	60	10.7		140		34		89		62		0			14		315		167.6	
7/15/2024	18	60	10.7		143		39		80		52		0			14		315		167.1	
7/15/2024	19	60	10.5		139		17		66		74		0	0		15		307	312	164.1	166.5
7/15/2024	20	60	10.5		142		13		37		65		0			14		309		167.1	
7/15/2024	21	60	10.6		140		19		45		57		0			14		310		168.0	
7/15/2024	22	60	10.7		141		18		38		52		0			15		309		167.3	
7/15/2024	23	60	10.5		143		18		40		54		0	0		14	14	310	309	168.5	167.7

Average: Geometric Mean Average:	141	6	OR	85	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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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.
7/15/2024	0	58	9.4		140		0		32		100		5			14		310		163.4	
7/15/2024	1	60	9.3		139		0		39		99		4			14		310		168.5	
7/15/2024	2	60	9.2		140		1		37		99		4			14		310		166.1	
7/15/2024	3	60	9.2		137		1		39		98		5	5		14		311	310	165.6	165.9
7/15/2024	4	60	9.3		136		2		37		96		5			14		310		167.2	
7/15/2024	5	60	9.5		140		0		21		100		5			14		310		167.9	
7/15/2024	6	60	9.5		140		0		14		100		5			14		310		165.9	
7/15/2024	7	60	9.6		136		0		20		100		9	6		14	14	309	310	168.8	167.4
7/15/2024	8	60	9.6		139		0		16		100		7			14		310		164.9	
7/15/2024	9	60	9.7		136		0		21		99		6			14		310		166.6	
7/15/2024	10	60	9.6		138		0		27		100		5			14		310		168.4	
7/15/2024	11	60	9.4		140		14		68		80		6	6		13		310	310	166.4	166.6
7/15/2024	12	60	9.2		141		0		20		100		6			16		310		165.6	
7/15/2024	13	60	9.3		139		0		27		98		6			14		310		167.8	
7/15/2024	14	60	9.3		139		2		27		94		5			15		310		168.4	
7/15/2024	15	60	9.2		140		4		30		87		5	6		16	14	310	310	167.7	167.4
7/15/2024	16	60	9.5		140		5		30		84		5			15		310		167.3	
7/15/2024	17	60	9.4		139		17		59		71		4			14		310		167.6	
7/15/2024	18	60	9.4		138		19		62		69		4			16		310		168.1	
7/15/2024	19	60	9.3		140		14		57		76		5	5		15		310	310	167.3	167.6
7/15/2024	20	60	9.3		140		3		34		91		5			15		310		167.9	
7/15/2024	21	60	9.3		140		0		27		98		4			15		310		164.7	
7/15/2024	22	60	9.4		139		2		30		92		5			15		310		168.0	
7/15/2024	23	60	9.5		139		1		27		96		4	4		16	15	310	310	166.7	166.8

Average: Geometric Mean Average:	139	1	OR	98	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 15-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 15-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