



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



Date 7/21/24

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.
7/21/2024	0	58	10.4		138		14		49		70		0			14		308		165.8	
7/21/2024	1	60	10.4		140		15		56		74		0			14		309		164.4	
7/21/2024	2	60	10.0		144		15		58		74		0			14		310		165.7	
7/21/2024	3	60	10.4		140		16		43		64		0	0		15		309	309	167.7	165.9
7/21/2024	4	60	10.2		141		30		59		50		0			10		310		165.4	
7/21/2024	5	60	10.3		142		17		51		67		0			19		309		166.7	
7/21/2024	6	60	10.3		139		19		49		62		0			16		309		166.5	
7/21/2024	7	60	10.2		144		20		58		65		0	0		13	15	310	310	165.6	166.0
7/21/2024	8	60	10.4		138		10		54		81		0			12		309		164.4	
7/21/2024	9	60	10.2		139		10		57		82		0			15		309		167.4	
7/21/2024	10	60	10.6		144		18		67		73		0			15		309		166.1	
7/21/2024	11	60	10.5		141		21		79		74		0	0		15		310	309	168.7	166.7
7/21/2024	12	60	10.5		140		20		70		72		0			15		309		167.9	
7/21/2024	13	60	10.5		141		23		84		73		0			15		310		168.4	
7/21/2024	14	60	10.5		140		22		67		67		0			15		309		169.1	
7/21/2024	15	60	10.3		143		17		56		71		0	0		14	14	310	310	167.6	168.2
7/21/2024	16	60	10.4		140		18		64		72		0			13		308		167.2	
7/21/2024	17	59	10.6		140		17		50		66		0			13		309		167.2	
7/21/2024	18	60	10.6		142		17		50		65		0			13		310		167.3	
7/21/2024	19	60	10.6		140		15		57		74		0	0		13		309	309	167.5	167.3
7/21/2024	20	60	10.6		142		15		52		72		0			13		309		165.9	
7/21/2024	21	60	10.5		140		17		57		70		0			13		310		166.6	
7/21/2024	22	60	10.4		143		14		58		76		0			13		310		167.2	
7/21/2024	23	60	10.5		138		19		62		69		0	0		13	13	310	310	166.2	166.5

Average: Geometric Mean Average:	141	17	OR	71	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 7/21/24

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.
7/21/2024	0	58	9.5		138		0		43		100		4			14		310		168.1	
7/21/2024	1	60	9.5		140		1		55		98		4			14		310		168.2	
7/21/2024	2	60	10.0		132		0		38		100		5			14		310		161.3	
7/21/2024	3	60	9.6		138		0		41		99		4	4		14		309	310	168.0	166.4
7/21/2024	4	60	9.7		139		1		45		97		4			13		310		168.0	
7/21/2024	5	60	9.7		136		1		44		98		4			14		310		167.9	
7/21/2024	6	60	10.3		140		1		39		98		4			14		309		161.5	
7/21/2024	7	60	10.1		137		5		49		89		9	5		14	14	312	310	163.3	165.2
7/21/2024	8	60	10.1		133		4		52		92		4			14		309		166.9	
7/21/2024	9	60	9.8		141		13		71		82		4			14		310		169.1	
7/21/2024	10	60	10.0		139		12		67		82		4			14		310		167.9	
7/21/2024	11	60	9.9		138		9		60		84		4	4		14		310	310	167.4	167.8
7/21/2024	12	60	10.0		140		15		74		80		4			14		310		167.9	
7/21/2024	13	60	10.0		141		16		71		77		4			14		310		166.4	
7/21/2024	14	60	9.9		140		13		64		80		4			14		310		168.4	
7/21/2024	15	60	9.8		139		2		52		96		4	4		14	14	310	310	166.9	167.4
7/21/2024	16	60	9.6		140		9		72		87		4			13		310		167.5	
7/21/2024	17	59	9.8		139		2		48		95		4			14		310		168.5	
7/21/2024	18	60	9.8		140		0		42		100		4			14		310		166.7	
7/21/2024	19	60	9.8		137		4		69		94		4	4		14		310	310	169.0	167.9
7/21/2024	20	60	9.9		140		1		49		99		4			14		310		166.9	
7/21/2024	21	60	9.8		140		3		59		94		4			14		310		168.0	
7/21/2024	22	60	9.8		140		3		56		94		3			14		310		166.9	
7/21/2024	23	60	9.9		138		6		60		90		4	4		14	14	310	310	166.3	167.0

Average: Geometric Mean Average:	139	2	OR	96	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 21-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	1	I	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	6	IC	1	1	1	1	1	1	2
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	I	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 21-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	I	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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