



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



Date 3/7/24

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.
3/7/2024	0	60	10.7		139		17		40		56		1			13		310		167.1	
3/7/2024	1	60	10.8		143		20		61		67		1			13		309		167.0	
3/7/2024	2	60	10.7		141		34		115		71		1			13		309		167.7	
3/7/2024	3	60	11.0		140		23		72		68		0	1		13		309	309	166.6	167.1
3/7/2024	4	60	11.0		144		18		57		68		0			13		309		166.8	
3/7/2024	5	60	10.9		142		22		66		67		0			13		309		166.8	
3/7/2024	6	60	10.7		139		20		52		62		10			13		310		167.9	
3/7/2024	7	60	10.6		142		22		52		58		0	3		13	13	309	309	165.3	166.7
3/7/2024	8	60	10.8		140		21		47		56		1			13		309		166.9	
3/7/2024	9	60	11.2		140		18		40		56		1			13		309		167.5	
3/7/2024	10	60	11.2		143		16		41		61		1			13		309		160.7	
3/7/2024	11	60	10.4		141		19		6	IBCM	0	IBCM	103	26		13		310	309	169.1	166.1
3/7/2024	12	60	10.8		138		17		74	IBCM	77	IBCM	1			13		309		168.2	
3/7/2024	13	60	10.7		140		17		32		47		3			13		309		162.9	
3/7/2024	14	60	10.8		139		17		25		31		1			13		309		164.8	
3/7/2024	15	60	11.3		143		17		13		0		40	11		13	13	310	309	163.1	164.7
3/7/2024	16	60	12.0		137		4		6		26		0			13		309		153.3	
3/7/2024	17	60	10.7		142		10		10		0		2			13		310		160.7	
3/7/2024	18	60	10.6		141		16		12		0		2			13		310		164.7	
3/7/2024	19	60	10.7		139		17		16		0		1	1		13		309	309	166.8	161.4
3/7/2024	20	60	10.8		141		24		41		41		1			13		310		162.0	
3/7/2024	21	60	11.3		140		27		41		33		0			13		309		164.4	
3/7/2024	22	60	11.2		141		20		22		9		6			13		309		166.9	
3/7/2024	23	60	10.7		141		18		18		0		1	2		13	13	310	309	161.7	163.8

Average:
Geometric Mean Average:

141	18
≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

44
≥ 80% Removal Efficiency

OR

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 3/7/24

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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.
3/7/2024	0	60	9.8		139		0		30		100		4			12		310		168.5	
3/7/2024	1	60	9.8		140		0		38		100		4			13		310		166.4	
3/7/2024	2	60	9.7		137		2		52		95		5			13		310		167.6	
3/7/2024	3	60	9.8		139		8		61		87		4	4		13		310	310	167.9	167.6
3/7/2024	4	60	10.1		142		13		72		83		8			14		310		167.2	
3/7/2024	5	60	10.0		141		17		76		78		6			13		310		167.2	
3/7/2024	6	60	9.8		139		0		26		99		5			13		310		167.8	
3/7/2024	7	60	9.7		140		0		31		100		5	6		13	13	310	310	166.9	167.3
3/7/2024	8	60	9.9		140		10		54		81		6			14		310		166.5	
3/7/2024	9	60	10.0		138		4		33		88		6			13		310		168.2	
3/7/2024	10	60	9.9		142		0		28		100		6			13		310		166.8	
3/7/2024	11	60	10.0		142		0		58	IBCM	100	IBCM	5	6		14		309	310	168.2	167.4
3/7/2024	12	60	10.1		138		0		35	IBCM	99	IBCM	5			13		310		166.8	
3/7/2024	13	60	9.8		139		3		45		94		6			13		310		166.9	
3/7/2024	14	60	10.0		138		0		25		100		6			13		310		167.0	
3/7/2024	15	60	9.9		144		2		42		94		6	5		13	13	310	310	167.6	167.1
3/7/2024	16	60	9.7		138		2		32		92		6			13		310		161.5	
3/7/2024	17	60	9.8		141		0		28		100		6			13		310		167.5	
3/7/2024	18	60	10.0		139		1		40		98		5			14		310		166.2	
3/7/2024	19	60	10.2		140		3		47		94		6	6		13		310	310	167.2	165.6
3/7/2024	20	60	10.1		138		19		94		80		6			13		310		165.0	
3/7/2024	21	60	10.0		140		29		95		70		6			13		310		168.0	
3/7/2024	22	60	10.1		138		14		67		78		5			13		310		167.5	
3/7/2024	23	60	9.9		138		4		45		92		6	6		13	13	310	310	167.2	166.9

Average:	140	1	97			
Geometric Mean Average:					see above	see above
Limit:	≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean	≥ 80% Removal Efficiency	OR	≤ 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 07-Mar-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	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	1	IC	4	IC	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0

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Date 07-Mar-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	1	2	1	1	2	2	2	2	2	2	1
1	2	2	2	2	2	1	2	2	2	2	1
2	2	2	2	2	2	2	2	2	2	2	2
3	2	2	2	2	2	2	2	2	1	2	1
4	2	2	2	2	2	2	2	2	2	2	2
5	2	2	2	2	2	2	2	2	2	2	2
6	1	IC	6	IC	2	2	2	2	2	2	2
7	2	1	2	2	2	2	2	2	2	2	1
8	2	2	2	2	2	2	2	2	2	2	2
9	2	2	2	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2	2	2	2
12	1	2	2	2	2	2	2	2	2	2	1
13	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	1	2	2	2	2	2	1
15	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	1	2	1
17	2	2	2	2	2	2	2	2	2	2	2
18	2	2	2	2	2	2	2	2	2	2	2
19	2	2	2	2	2	2	2	2	2	2	2
20	1	2	1	2	2	2	2	2	2	2	1
21	2	2	2	1	1	2	2	2	2	2	1
22	2	2	2	2	2	2	1	1	2	2	1
23	1	2	2	1	2	2	1	2	1	2	1

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