



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



Date 3/22/24

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.
3/22/2024	0	60	10.7		131		18		22		17		0			14		309		166.8	
3/22/2024	1	60	10.7		136		22		29		24		0			13		309		166.1	
3/22/2024	2	60	10.7		141		39		67		42		53			14		310		167.5	
3/22/2024	3	60	11.0		138		27		39		32		1	14		13		309	309	166.5	166.7
3/22/2024	4	60	11.0		141		26		46		43		1			11		309		165.4	
3/22/2024	5	60	10.8		144		27		44		38		1			13		309		167.4	
3/22/2024	6	60	10.9		138		23		24		2		0			12		309		166.4	
3/22/2024	7	60	10.9		140		20		15		0		1	1		12	13	310	309	165.6	166.2
3/22/2024	8	60	10.8		142		19		16		0		1			13		310		166.6	
3/22/2024	9	60	10.9		140		21		17		0		2			13		309		166.8	
3/22/2024	10	60	10.8		143		20		17		0		1			12		310		168.1	
3/22/2024	11	60	11.0		139		21		18		0		1	1		12		309	309	167.9	167.3
3/22/2024	12	60	10.9		141		13		8		0		1			13		309		164.6	
3/22/2024	13	60	10.7		141		11		2		0		1			12		310		168.8	
3/22/2024	14	60	10.8		141		21		13		0		1			13		309		167.4	
3/22/2024	15	60	10.7		142		17		16		0		1	1		12	13	310	309	167.8	167.2
3/22/2024	16	60	10.6		140		19		19		1		1			13		309		167.2	
3/22/2024	17	60	10.7		141		23		17		0		1			13		309		165.2	
3/22/2024	18	60	10.8		141		20		17		0		1			13		311		165.1	
3/22/2024	19	60	10.8		141		14		11		0		1	1		13		311	310	168.2	166.4
3/22/2024	20	60	11.0		140		14		15		10		1			13		309		165.7	
3/22/2024	21	60	10.9		141		19		19		0		1			14		310		167.0	
3/22/2024	22	60	10.8		142		13		8		0		1			13		310		166.6	
3/22/2024	23	60	10.8		138		19		12		0		1	1		13	13	309	309	166.9	166.6

Average: Geometric Mean Average:	140	20	0	OR	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 3/22/24

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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.
3/22/2024	0	60	10.2		139		2		25		93		6			14		310		166.4	
3/22/2024	1	60	10.1		140		4		30		88		6			14		310		167.8	
3/22/2024	2	60	10.3		140		17		44		61		6			13		310		167.2	
3/22/2024	3	60	10.5		140		15		39		61		6	6		14		310	310	166.4	167.0
3/22/2024	4	60	10.6		141		16		37		58		6			18		310		166.5	
3/22/2024	5	60	10.5		141		16		29		44		6			10		310		167.7	
3/22/2024	6	60	10.4		140		13		18		29		6			13		310		167.8	
3/22/2024	7	60	10.6		139		6		21		71		8	6		11	13	310	310	167.7	167.4
3/22/2024	8	60	11.1		140		4		21		79		7			17		310		167.5	
3/22/2024	9	60	11.2		141		13		28		54		7			11		310		167.5	
3/22/2024	10	60	11.4		139		23		37		39		7			13		310		167.9	
3/22/2024	11	60	11.3		139		7		20		67		6	7		14		310	310	167.8	167.7
3/22/2024	12	60	11.0		139		0		11		98		9			13		310		167.8	
3/22/2024	13	60	10.9		139		0		4		100		6			14		310		167.0	
3/22/2024	14	60	10.7		140		1		26		98		5			14		310		166.9	
3/22/2024	15	60	10.9		139		0		20		98		5	6		14	14	310	310	167.0	167.2
3/22/2024	16	60	10.6		141		0		15		100		6			14		310		166.7	
3/22/2024	17	60	10.7		140		0		22		100		6			14		310		166.7	
3/22/2024	18	60	10.7		140		0		18		100		6			14		310		167.8	
3/22/2024	19	60	10.9		137		0		20		100		7	6		14		310	310	166.1	166.9
3/22/2024	20	60	10.9		141		0		32		100		7			14		310		166.7	
3/22/2024	21	60	11.0		137		0		39		99		8			14		310		168.0	
3/22/2024	22	60	10.7		141		0		24		100		6			14		310		167.7	
3/22/2024	23	60	10.8		138		0		16		100		6	7		14	14	310	310	167.8	167.6

Average: Geometric Mean Average:	140	1	OR	97	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 22-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	1	1	1	0	0	0	1	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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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 22-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	1	1	1	1	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	1	1
3	1	1	1	2	2	2	2	2	1	2	1
4	1	2	2	2	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	2	1	1	1
6	1	IC	7	IC	1	1	1	1	1	1	2
7	2	1	2	1	1	1	1	2	2	1	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	2	1	2	1	2	2	2	1	1	2	1
13	1	1	1	1	1	1	2	2	1	1	1
14	1	1	1	2	1	2	2	1	1	2	1
15	2	2	2	2	2	2	1	1	1	2	1
16	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1	1

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