



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



Date 4/4/24

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.	4 Hr Block
4/4/2024	0	0	20.1	IF	0	IF	6	IF	-253	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	1	0	20.1	IF	0	IF	6	IF	-371	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	2	0	20.1	IF	0	IF	6	IF	-409	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	3	0	19.4	ICF	0	ICF	52	ICF	-620	IBF	0	IBCF	0	ICF	0	ICF		132	132	0.0	0.0	
4/4/2024	4	0	16.8	IBCF	56	IBCF	51	IBCF	-935	IBF	0	IBCF	449	IBCF		0		132		0.0		
4/4/2024	5	0	20.1	IF	0	IF	6	IF	153	IBCF	96	IBCF	0	IF		0		132		0.0		
4/4/2024	6	0	20.1	IF	0	IF	6	IF	-91	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	7	0	20.1	IF	0	IF	5	IF	-49	IBF	0	IBF	1	IF	113	IBCF	0	0	132	132	0.0	0.0
4/4/2024	8	0	20.0	IF	0	IF	5	IF	-34	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	9	0	20.0	IF	0	IF	5	IF	-22	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	10	0	20.0	IF	0	IF	5	IF	-39	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	11	0	20.0	IF	0	IF	5	IF	-60	IBF	0	IBF	0	IF	0	IF		132	132	0.0	0.0	
4/4/2024	12	0	20.1	IF	0	IF	5	IF	-66	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	13	0	20.0	IF	0	IF	77	IF	-60	IBF	0	IBF	18	IF		0		132		0.0		
4/4/2024	14	0	20.0	IF	15	IF	59	IF	-111	IBF	0	IBF	6	IF		0		132		0.0		
4/4/2024	15	0	20.0	IF	0	IF	72	IF	-100	IBF	0	IBF	0	IF	6	IF	0	0	132	132	0.0	0.0
4/4/2024	16	0	20.0	IF	0	IF	78	IF	-113	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	17	0	19.9	IF	13	IF	56	IF	-94	IBF	0	IBF	4	IF		0		132		0.0		
4/4/2024	18	0	19.9	IF	45	IF	32	IF	-90	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	19	0	20.0	IF	15	IF	36	IF	-111	IBF	0	IBF	0	IF	1	IF		132	132	0.0	0.0	
4/4/2024	20	1	13.5	IF	0	IF	17	IF	-110	IBF	0	IBF	1	IF		0		132		0.0		
4/4/2024	21	0	20.0	IF	0	IF	78	IF	-122	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	22	0	20.0	IF	22	IF	60	IF	-144	IBF	0	IBF	0	IF		0		132		0.0		
4/4/2024	23	0	20.0	IF	9	IF	60	IF	-166	IBF	0	IBF	1	IF	0	IF	0	0	132	132	0.0	0.0

Average:  
Geometric Mean Average:

Limit:

7 IBCF
19 IBCF
≤ 150 24-HR Block Avg.

OR

0 IBCF
≥ 80% Removal Efficiency

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



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



Date 4/4/24

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.
4/4/2024	0	60	8.0		140		6		41		84		4			14		311		164.6	
4/4/2024	1	60	8.0		141		6		38		84		4			13		310		166.9	
4/4/2024	2	60	8.1		139		15		48		70		4			14		310		166.8	
4/4/2024	3	60	8.3		139		17		43		60		5	4		13		310	310	167.0	166.3
4/4/2024	4	60	8.2		140		5		27		81		7			13		310		168.0	
4/4/2024	5	60	8.0		139		10		30		67		5			14		310		168.0	
4/4/2024	6	60	8.0		140		6		24		74		5			13		310		167.5	
4/4/2024	7	60	8.3		136		8		23		66		6	6		14	14	309	310	167.2	167.7
4/4/2024	8	60	8.4		139		4		24		83		4			14		310		166.7	
4/4/2024	9	60	8.0		139		0		13		99		6			14		310		166.2	
4/4/2024	10	60	8.1		141		4		27		84		7			14		310		166.3	
4/4/2024	11	60	7.9		137		6		29		80		10	7		14		309	310	160.5	164.9
4/4/2024	12	60	8.9		139		0		10		100		85			14		311		138.4	
4/4/2024	13	60	7.5		140		4		36		88		6			14		310		165.3	
4/4/2024	14	60	7.6		140		1		23		96		8			14		310		162.2	
4/4/2024	15	60	7.7		137		1		21		97		7	27		14	14	310	310	164.6	157.6
4/4/2024	16	60	7.9		137		0		18		100		8			14		310		153.6	
4/4/2024	17	60	7.8		138		2		25		94		11			14		310		148.7	
4/4/2024	18	60	7.8		139		1		24		95		6			14		310		167.5	
4/4/2024	19	60	7.3		137		2		32		93		7	8		14		310	310	158.4	157.1
4/4/2024	20	60	7.6		138		12		47		74		8			13		310		153.2	
4/4/2024	21	60	7.7		141		13		36		65		6			11		311		163.3	
4/4/2024	22	60	8.0		137		8		31		74		8			10		309		163.0	
4/4/2024	23	60	7.9		140		12		33		63		8	8		15	13	310	310	165.3	161.2

Average: Geometric Mean Average:	139	2	<b>OR</b>	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

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# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 04-Apr-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	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1
6	1	IC	6	IC	1	1	1	1	1	1	2
7	1	1	1	1	1	1	1	1	1	1	1
8	2	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1
12	2	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1	1
16	1	1	2	1	1	1	1	1	1	1	1
17	1	1	2	1	2	2	1	1	1	2	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

**Status Flags**

I - Invalid                      C - Calibration                      F - Offline                      T - Out of Control                      ^ - Startup  
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