



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



Date 4/15/22

Wheel Plant Wheelabrator North Andover  
Unit 1 Unit 1  
Outlet 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.
4/15/2022	0	60	9.9		190		11		29		61		5			13		309		166.0	
4/15/2022	1	60	9.7		158		10		35		71		7			13		310		161.8	
4/15/2022	2	60	9.3		140		9		34		73		9			13		309		163.9	
4/15/2022	3	54	11.8		165		9		33		72		200	55		13		307	309	124.3	154.0
4/15/2022	4	13	17.0	IBCF	295	IBCF	63	IBCF	161	IBCF	60	IBCF	682	IBCF		13		308		37.1	
4/15/2022	5	0	20.8	IF	86	IF	7	IF	151	IBCF	95	IBCF	9	IF		0		242		11.8	
4/15/2022	6	0	20.8	IF	67	IF	8	IF	108	IBF	93	IBF	3	IF		0		233		0.0	
4/15/2022	7	0	20.8	IF	55	IF	8	IF	94	IBMF	91	IBMF	2	IF	174	IBCF	13	206	247	0.0	12.2
4/15/2022	8	0	20.9	IF	47	IF	8	IF	133	IBMF	94	IBMF	2	IF		0		184		0.0	
4/15/2022	9	0	20.9	IF	41	IF	8	IF	133	IBF	94	IBF	3	IF		0		166		0.0	
4/15/2022	10	0	20.9	IF	30	IF	9	IF	109	IBF	92	IBF	0	IF		1		148		0.0	
4/15/2022	11	0	20.9	IF	24	IF	8	IF	104	IBF	92	IBF	0	IF	1	IF	1	136	159	0.0	0.0
4/15/2022	12	0	20.9	IF	23	IF	9	IF	87	IBF	90	IBF	0	IF		1		134		0.0	
4/15/2022	13	0	20.9	IF	20	IF	9	IF	78	IBF	89	IBF	0	IF		1		131		0.0	
4/15/2022	14	0	20.9	IF	18	IF	8	IF	67	IBF	87	IBF	0	IF		1		128		0.0	
4/15/2022	15	0	20.9	IF	18	IF	9	IF	53	IBF	84	IBF	0	IF	0	IF	1	125	130	0.0	0.0
4/15/2022	16	0	20.9	IF	18	IF	9	IF	42	IBF	79	IBF	0	IF		1		123		0.0	
4/15/2022	17	0	20.9	IF	17	IF	8	IF	35	IBF	76	IBF	0	IF		0		120		0.0	
4/15/2022	18	0	20.9	IF	17	IF	8	IF	30	IBF	72	IBF	0	IF		0		116		0.0	
4/15/2022	19	0	20.9	IF	17	IF	8	IF	24	IBF	64	IBF	0	IF	0	IF	0	113	118	0.0	0.0
4/15/2022	20	0	20.9	IF	17	IF	8	IF	21	IBF	59	IBF	0	IF		0		109		0.0	
4/15/2022	21	0	20.9	IF	18	IF	9	IF	18	IBF	53	IBF	0	IF		0		106		0.0	
4/15/2022	22	0	20.9	IF	18	IF	9	IF	8	IBF	0	IBF	0	IF		0		103		0.0	
4/15/2022	23	0	20.9	IF	18	IF	9	IF	5	IBF	0	IBF	0	IF	0	IF	0	100	104	0.0	0.0

Average: Geometric Mean Average:	<b>163</b>	<b>10</b>	OR	<b>70</b>	see above	see above	see above	see above
Limit:	<b>≤ 205</b> 24-HR Block Avg.	<b>≤ 29</b> 24-HR Geometric Mean		<b>≥ 75%</b> Removal Efficiency	<b>≤ 69</b> ppmc 4-HR Block Average	<b>≤ 12</b> lb/hr 8-HR. Block Average	<b>≤ 345</b> °F 4-HR Block Average	<b>≤ 173</b> 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 COMPLIANCE SUMMARY REPORT



Date 4/15/22

Wheel Plant Wheelabrator North Andover  
Unit 2 Unit Unit 1  
Outlet 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.
4/15/2022	0	60	10.0		184		2		57		97		1			14		310		165.3	
4/15/2022	1	60	10.0		197		1		65		98		2			13		310		165.7	
4/15/2022	2	60	9.9		192		1		53		99		1			13		310		166.2	
4/15/2022	3	60	10.0		179		1		42		98		2	2		13		310	310	165.0	165.5
4/15/2022	4	60	9.9		196		2		35		95		3			13		310		165.8	
4/15/2022	5	60	10.0		192		1		48		98		2			13		310		166.1	
4/15/2022	6	60	10.0		193		0		44		100		2			15		310		166.0	
4/15/2022	7	60	9.9		190		1		45		98		2	2		17	14	310	310	165.3	165.8
4/15/2022	8	60	10.2		184		1		61		98		2			17		310		163.7	
4/15/2022	9	60	10.1		176		12		111		89		3			17		310		165.1	
4/15/2022	10	60	10.0		186		4		79		94		3			17		310		166.1	
4/15/2022	11	60	10.0		181		1		41		99		3	3		16		310	310	165.6	165.1
4/15/2022	12	60	9.9		186		0		35		99		3			16		310		164.8	
4/15/2022	13	60	9.8		190		2		44		95		3			16		310		166.4	
4/15/2022	14	60	9.8		192		1		49		99		4			16		310		165.8	
4/15/2022	15	60	9.7		185		1		40		98		2	3		14	16	310	310	163.8	165.2
4/15/2022	16	60	9.9		192		1		37		98		3			13		310		167.2	
4/15/2022	17	60	9.9		189		1		67		99		3			11		310		166.0	
4/15/2022	18	60	9.8		186		1		52		99		2			12		310		165.2	
4/15/2022	19	60	9.7		188		1		40		98		3	3		13		310	310	165.1	165.9
4/15/2022	20	60	9.7		182		1		56		98		2			15		310		166.1	
4/15/2022	21	60	10.0		194		4		65		94		2			16		310		165.6	
4/15/2022	22	60	9.9		186		3		64		96		2			15		310		165.8	
4/15/2022	23	60	9.8		182		2		54		97		2	2		15	14	310	310	165.6	165.8

Average:  
Geometric Mean Average:

Limit:

188	1
≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

98
≥ 75% 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

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



Date 15-Apr-2022

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	2	2	2	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	2	2	2	2
3	2	2	2	2	2	2	2	2	2	2	2
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	2	IBC	6	IBC	2	2	2	2	2	2	3
7	2	2	2	2	2	2	2	2	2	2	2
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	2	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	2	2	2
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	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	2	2	2
22	2	2	2	2	2	2	2	2	2	2	2
23	2	2	2	2	2	2	2	2	2	2	2

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Date 15-Apr-2022

Plant Wheelabrator North Andover  
Unit Unit 1  
Source Outlet

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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	2	2	2	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	2	2	2	2
3	2	2	2	2	2	2	2	2	2	2	2
4	2	2	2	IF	2	IF	2	IF	2	IF	2
5	2	IF	2	IF	2	IF	2	IF	2	IF	2
6	2	ICF	23	ICF	2	IF	2	IF	2	IF	2
7	2	IF	2	IF	2	IF	2	IF	2	IF	2
8	2	IF	2	IF	2	IF	2	IF	2	IF	2
9	2	IF	2	IF	2	IF	2	IF	2	IF	2
10	2	IF	2	IF	2	IF	2	IF	2	IF	2
11	2	IF	2	IF	2	IF	2	IF	2	IF	2
12	2	IF	2	IF	2	IF	2	IF	2	IF	2
13	2	IF	2	IF	2	IF	2	IF	2	IF	2
14	2	IF	2	IF	2	IF	2	IF	2	IF	2
15	2	IF	2	IF	2	IF	2	IF	2	IF	2
16	2	IF	2	IF	2	IF	2	IF	2	IF	2
17	2	IF	2	IF	2	IF	2	IF	2	IF	2
18	2	IF	2	IF	2	IF	2	IF	2	IF	2
19	2	IF	2	IF	2	IF	2	IF	2	IF	2
20	2	IF	2	IF	2	IF	2	IF	2	IF	2
21	2	IF	2	IF	2	IF	2	IF	2	IF	2
22	2	IF	2	IF	2	IF	2	IF	2	IF	2
23	2	IF	2	IF	2	IF	2	IF	2	IF	2

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