



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



Date 5/20/22

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 Hr Block
5/20/2022	0	0	21.0	IF	39	IF	7	IF	265	IBF	97	IBF	0	IF			0		70		0.0	
5/20/2022	1	0	21.0	IF	39	IF	7	IF	276	IBF	97	IBF	0	IF			1		70		0.0	
5/20/2022	2	0	21.0	IF	39	IF	7	IF	295	IBF	97	IBF	0	IF			1		76		0.0	
5/20/2022	3	5	20.2	ICF	37	ICF	7	ICF	308	IBF	98	IBCF	0	ICF	0	ICF	0		77	73	0.0	0.0
5/20/2022	4	13	17.3	IBCF	168	IBCF	61	IBCF	308	IBF	80	IBCF	541	IBCF			1		78		0.0	
5/20/2022	5	0	21.0	IF	35	IF	7	IF	160	IBCF	95	IBCF	0	IF			0		72		0.0	
5/20/2022	6	0	21.0	IF	35	IF	7	IF	339	IBF	98	IBF	0	IF			0		70		0.0	
5/20/2022	7	0	21.0	IF	35	IF	7	IF	320	IBF	98	IBF	0	IF	135	IBCF	1	1	69	72	0.0	0.0
5/20/2022	8	0	21.0	IF	35	IF	7	IF	307	IBF	98	IBF	0	IF			0		69		0.0	
5/20/2022	9	0	21.0	IF	34	IF	7	IF	299	IBF	98	IBF	0	IF			0		69		0.0	
5/20/2022	10	0	21.0	IF	35	IF	7	IF	291	IBF	98	IBF	0	IF			0		69		0.0	
5/20/2022	11	0	21.0	IF	36	IF	7	IF	283	IBF	97	IBF	0	IF	0	IF	1		70	69	0.0	0.0
5/20/2022	12	0	21.0	IF	36	IF	7	IF	280	IBF	97	IBF	0	IF			0		71		0.0	
5/20/2022	13	0	21.0	IF	36	IF	7	IF	280	IBF	97	IBF	0	IF			0		72		0.0	
5/20/2022	14	0	21.0	IF	38	IF	7	IF	293	IBF	98	IBF	0	IF			1		74		0.0	
5/20/2022	15	0	21.0	IF	40	IF	7	IF	296	IBF	98	IBF	0	IF	0	IF	0	0	75	73	0.0	0.0
5/20/2022	16	0	21.0	IF	42	IF	7	IF	293	IBF	98	IBF	0	IF			0		75		0.0	
5/20/2022	17	0	21.0	IF	42	IF	7	IF	274	IBF	97	IBF	0	IF			1		74		0.0	
5/20/2022	18	0	21.0	IF	41	IF	7	IF	262	IBF	97	IBF	0	IF			0		73		0.0	
5/20/2022	19	0	21.0	IF	40	IF	7	IF	271	IBF	97	IBF	0	IF	0	IF	1		72	74	0.0	0.0
5/20/2022	20	0	21.0	IF	39	IF	7	IF	270	IBF	97	IBF	0	IF			1		71		0.0	
5/20/2022	21	0	21.0	IF	39	IF	7	IF	268	IBF	97	IBF	0	IF			1		71		0.0	
5/20/2022	22	0	21.0	IF	39	IF	7	IF	267	IBF	97	IBF	0	IF			1		71		0.0	
5/20/2022	23	0	21.0	IF	40	IF	7	IF	271	IBF	97	IBF	0	IF	0	IF	0	1	71	71	0.0	0.0

Average:
Geometric Mean Average:

Limit:

43 IBCF	8 IBCF
≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

0 IBCF
≥ 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

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 5/20/22

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.
5/20/2022	0	60	9.8		190		1		1		44		1			14		310		165.3	
5/20/2022	1	60	9.9		189		1		0		0		2			14		310		165.7	
5/20/2022	2	60	9.9		190		0		0		0		1			14		310		165.5	
5/20/2022	3	60	9.9		191		1		1		25		1	1		14		310	310	166.0	165.6
5/20/2022	4	60	9.8		188		2		0		0		3			14		310		165.5	
5/20/2022	5	60	10.0		192		2		5		50		2			14		310		165.5	
5/20/2022	6	60	10.0		193		3		4		15		3			14		310		164.2	
5/20/2022	7	60	10.3		189		3		4		10		2	3		14	14	310	310	165.9	165.3
5/20/2022	8	60	10.4		181		4		6		32		3			14		310		165.7	
5/20/2022	9	60	10.4		194		3		4		30		4			14		310		158.6	
5/20/2022	10	60	10.4		189		3		3		0		3			14		310		164.6	
5/20/2022	11	60	10.4		194		4		6		29		4	4		14		310	310	164.4	163.3
5/20/2022	12	60	10.4		183		9		13		36		7			14		310		165.0	
5/20/2022	13	60	10.0		193		1		0		0		5			14		310		164.2	
5/20/2022	14	60	10.2		193		2		0		0		4			14		309		166.1	
5/20/2022	15	60	10.4		197		1		0		0		2	5		14	14	310	310	165.0	165.1
5/20/2022	16	60	10.3		196		1		0		0		3			14		309		156.9	
5/20/2022	17	60	11.2		187		2		0		0		6			14		310		133.6	
5/20/2022	18	60	10.4		175		2		4		53		10			14		310		136.1	
5/20/2022	19	60	10.4		193		1		0		0		3	6		14		309	310	147.2	143.4
5/20/2022	20	60	10.1		190		1		0		0		3			15		311		158.9	
5/20/2022	21	60	11.0		187		2		0		0		4			15		309		154.4	
5/20/2022	22	49	15.7		227		8		0		0		802			15		308		114.3	
5/20/2022	23	0	20.4	IF	26	IF	6	IF	0	IBF	0	IBF	219	IF	270	4	14	295	309	21.1	142.5

Average: Geometric Mean Average:	191	2	OR	0	see above	see above	see above	see above			
Limit:	≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean		≥ 75% Removal Efficiency	≤ 69 4-HR Block Average	ppmc	≤ 12 8-HR. Block Average	lb/hr	≤ 345 °F 4-HR Block Average	≤ 173 4-HR Block Average	klb/hr

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 20-May-2022

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	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
1	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
2	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
3	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
4	2		2		2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
5	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
6	2	ICF	23	ICF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	4
7	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
8	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
9	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
10	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
11	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
12	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
13	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
14	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
15	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
16	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
17	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
18	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
19	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
20	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
21	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
22	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2
23	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2	IF	2

Status Flags

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 20-May-2022

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Unit Unit 2
Source Outlet

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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	0
1	0		0		0		0		0		0		0		0		0		0		0	0
2	0		0		0		0		0		0		0		0		0		0		0	0
3	0		0		0		0		0		0		0		0		0		0		0	0
4	0		0		0		0		0		0		0		0		0		0		0	0
5	0		0		0		0		0		0		0		0		0		0		0	0
6	2	IBC	4	IBC	0		0		0		0		0		0		0		0		0	1
7	0		0		0		0		0		0		0		0		0		0		0	0
8	0		0		0		0		0		0		0		0		0		0		0	0
9	0		0		0		0		0		0		0		0		0		0		0	0
10	0		0		0		0		0		0		0		0		0		0		0	0
11	0		0		0		0		0		0		0		0		0		0		0	0
12	0		0		0		0		0		0		0		0		0		0		0	0
13	0		0		0		0		0		0		0		0		0		0		0	0
14	0		0		0		0		0		0		0		0		0		0		0	0
15	0		0		0		0		0		0		0		0		0		0		0	0
16	0		0		0		0		0		0		0		0		0		0		0	0
17	0		0		0		0		0		0		0		0		0		0		0	0
18	0		0		0		0		0		0		0		0		0		0		0	0
19	0		0		0		0		0		0		0		0		0		0		0	0
20	0		0		0		0		0		0		0		0		0		0		0	0
21	0		0		0		0		0		0		0		0		0		0		0	0
22	1		1		1		0		0		0		0		0		0	IF	0	IF	0	0
23	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	0

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