



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



Date 5/18/22

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
5/18/2022	0	0	20.9	IF	49	IF	8	IF	227	IBF	97	IBF	12	IF		0		253		17.7		
5/18/2022	1	0	20.9	IF	33	IF	8	IF	216	IBF	96	IBF	9	IF		1		236		5.2		
5/18/2022	2	0	20.9	IF	32	IF	8	IF	213	IBF	96	IBF	5	IF		1		206		1.1		
5/18/2022	3	5	20.1	ICF	30	ICF	8	ICF	185	IBF	96	IBCF	4	ICF	8	ICF		165	215	0.0	6.0	
5/18/2022	4	13	17.2	IBCF	151	IBCF	65	IBCF	169	IBF	62	IBCF	536	IBCF		3		161		0.0		
5/18/2022	5	0	20.9	IF	30	IF	9	IF	150	IBCF	94	IBCF	0	IF		1		130		0.0		
5/18/2022	6	0	20.9	IF	29	IF	9	IF	149	IBF	94	IBF	0	IF		0		116		0.0		
5/18/2022	7	0	20.9	IF	28	IF	8	IF	147	IBF	94	IBF	0	IF	134	IBCF	1	1	108	129	0.0	0.0
5/18/2022	8	0	20.9	IF	26	IF	9	IF	135	IBF	93	IBF	0	IF		1		101		0.0		
5/18/2022	9	0	20.9	IF	26	IF	9	IF	128	IBF	93	IBF	1	IF		1		98		0.0		
5/18/2022	10	0	20.9	IBF	23	IBF	9	IBF	116	IBF	92	IBF	1	IBF		1		96		0.0		
5/18/2022	11	0	20.9	IBF	0	IBF	1	IBF	109	IBF	99	IBF	0	IBF	1	IBF		94	97	0.0	0.0	
5/18/2022	12	0	20.9	IBF	0	IBF	1	IBF	99	IBF	99	IBF	0	IBF		1		93		0.0		
5/18/2022	13	0	20.9	IBF	0	IBF	1	IBF	85	IBF	99	IBF	0	IBF		1		93		0.0		
5/18/2022	14	0	20.9	IBF	0	IBF	1	IBF	69	IBF	99	IBF	0	IBF		0		92		0.0		
5/18/2022	15	0	20.9	IBF	14	IBF	6	IBF	64	IBF	90	IBF	0	IBF	0	IBF	1	1	92	93	0.0	0.0
5/18/2022	16	0	20.9	IF	20	IF	9	IF	73	IBF	88	IBF	0	IF		1		91		0.0		
5/18/2022	17	0	20.9	IF	20	IF	8	IF	83	IBF	90	IBF	0	IF		0		90		0.0		
5/18/2022	18	0	20.9	IF	19	IF	9	IF	85	IBF	89	IBF	0	IF		0		88		0.0		
5/18/2022	19	0	20.9	IF	21	IF	9	IF	80	IBF	89	IBF	0	IF	0	IF	1	1	87	89	0.0	0.0
5/18/2022	20	0	20.9	IF	29	IF	9	IF	78	IBF	88	IBF	0	IF		0		85		0.0		
5/18/2022	21	0	20.9	IF	30	IF	9	IF	71	IBF	87	IBF	0	IF		0		82		0.0		
5/18/2022	22	0	20.9	IF	33	IF	9	IF	65	IBF	86	IBF	0	IF		1		80		0.0		
5/18/2022	23	0	20.9	IF	32	IF	8	IF	69	IBF	88	IBF	0	IF	0	IF	1	1	77	81	0.0	0.0

Average:
Geometric Mean Average:

Limit:

28 IBCF	6 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 5/18/22

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.
5/18/2022	0	60	9.8		193		4		61		93		3			14		310		165.7	
5/18/2022	1	60	9.5		194		2		42		96		3			14		310		166.2	
5/18/2022	2	60	9.7		189		2		41		94		3			15		310		164.6	
5/18/2022	3	60	9.7		188		2		34		93		2	3		15		310	310	164.5	165.3
5/18/2022	4	60	10.0		193		5		39		87		4			15		310		162.9	
5/18/2022	5	60	10.0		193		10		34		69		2			14		310		165.9	
5/18/2022	6	60	9.9		186		13		43		71		3			14		310		167.7	
5/18/2022	7	60	10.0		183		0		13		96		3	3		14	14	310	310	163.8	165.1
5/18/2022	8	60	10.0		172		1		15		93		3			15		310		166.4	
5/18/2022	9	60	10.0		197		19		93		80		5			15		310		165.7	
5/18/2022	10	60	10.2		198		3		13		74		3			15		310		166.9	
5/18/2022	11	60	10.3		192		3		17		82		3	4		15		310	310	166.1	166.3
5/18/2022	12	60	9.7		195		4		21		83		6			14		310		166.3	
5/18/2022	13	60	10.1		196		5		12		60		4			14		310		164.9	
5/18/2022	14	60	9.7		186		3		14		80		5			13		310		165.5	
5/18/2022	15	60	10.1		166		12		31		61		4	5		14	14	310	310	165.0	165.4
5/18/2022	16	60	9.8		193		5		21		77		4			14		310		164.5	
5/18/2022	17	60	9.8		193		3		9		61		3			14		310		165.6	
5/18/2022	18	60	9.6		194		2		6		69		4			14		310		165.2	
5/18/2022	19	60	9.7		193		3		12		74		3	4		14		310	310	165.7	165.2
5/18/2022	20	60	9.7		192		2		10		78		4			14		310		164.9	
5/18/2022	21	60	9.6		195		5		19		73		3			14		310		166.9	
5/18/2022	22	60	9.7		193		13		38		66		4			15		310		163.3	
5/18/2022	23	60	9.7		190		10		30		66		4	4		14	14	310	310	165.4	165.1

Average:
Geometric Mean Average:

Limit:

190	4
≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

82
≥ 75% Removal Efficiency

see above
≤ 69 ppmc 4-HR Block Average

see above
≤ 12 lb/hr 8-HR. Block Average

see above
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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 18-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

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 18-May-2022

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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
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	2	IBC	4	IBC	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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