



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



Date 2/27/22

Wheel Plant Wheelabrator North Andover
Unit 1 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.
2/27/2022	0	60	10.2		181		25		65		61		4			12		308		163.3	
2/27/2022	1	60	10.1		194		23		57		59		2			14		309		166.7	
2/27/2022	2	60	9.9		196		19		35		45		2			13		310		166.8	
2/27/2022	3	60	10.0		194		16		29		45		3	3		13		309	309	164.5	165.3
2/27/2022	4	60	10.0		194		20		30		34		3			13		310		166.5	
2/27/2022	5	60	10.0		200		13		11		0		4			13		309		164.5	
2/27/2022	6	60	9.7		198		18		32		44		4			13	13	310		166.2	
2/27/2022	7	60	9.9		198		21		52		59		4	4		13		309	309	164.5	165.5
2/27/2022	8	60	9.7		190		20		47		57		5			13		309		164.1	
2/27/2022	9	60	9.7		194		19		56		66		4			13		309		168.0	
2/27/2022	10	60	10.0		194		24		59		59		4			13		309		163.2	
2/27/2022	11	60	9.7		196		24		64		63		4	4		14		309	309	165.6	165.2
2/27/2022	12	60	9.7		192		22		64		65		4			14		310		163.5	
2/27/2022	13	60	9.7		197		20		47		58		4			13		309		166.5	
2/27/2022	14	60	10.0		193		21		42		50		2			13		309		164.8	
2/27/2022	15	60	10.1		198		20		35		44		3	3		14	13	309	309	166.4	165.3
2/27/2022	16	60	10.0		195		19		44		57		3			13		309		165.9	
2/27/2022	17	60	10.2		195		20		33		38		3			13		309		163.4	
2/27/2022	18	60	10.3		197		16		35		55		4			13		309		161.8	
2/27/2022	19	60	10.1		201		24		41		42		4	3		13		309	309	166.4	164.4
2/27/2022	20	60	10.2		196		24		46		47		3			13		309		165.5	
2/27/2022	21	60	10.0		200		18		39		54		3			13		310		166.6	
2/27/2022	22	60	10.3		200		28		74		62		3			14		309		165.6	
2/27/2022	23	60	10.1		198		27		97		72		4	3		13	13	310	309	166.0	165.9

Average:
Geometric Mean Average:

Limit:

195	21
≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

53
≥ 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



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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.
2/27/2022	0	60	8.7		154		13		56		77		1			14		306		170.7	
2/27/2022	1	60	8.6		160		7		42		83		0			14		303		171.3	
2/27/2022	2	60	9.5		180		7		37		80		0			14		300		161.1	
2/27/2022	3	60	9.5		180		8		29		73		0	1		13		307	304	157.9	165.2
2/27/2022	4	60	8.8		174		11		39		73		1			14		312		169.8	
2/27/2022	5	60	9.5		184		8		25		68		2			13		304		157.1	
2/27/2022	6	60	9.0		189		12		35		66		1			14		307		165.1	
2/27/2022	7	60	9.0		186		14		48		70		1	1		13	14	300	306	166.8	164.7
2/27/2022	8	60	8.7		185		16		48		66		1			13		307		166.9	
2/27/2022	9	60	8.9		187		19		42		55		1			14		312		163.9	
2/27/2022	10	60	9.0		192		14		46		69		2			14		312		163.2	
2/27/2022	11	60	8.7		184		15		54		72		1	1		14		306	309	168.8	165.7
2/27/2022	12	60	8.3		166		12		56		78		4			14		309		172.5	
2/27/2022	13	60	8.7		184		4		50		92		25			14		295		165.0	
2/27/2022	14	60	9.0		185		7		41		83		1			14		305		164.1	
2/27/2022	15	60	9.1		190		8		38		78		1	8		13	14	304	303	164.1	166.4
2/27/2022	16	60	9.0		185		12		40		69		1			12		305		165.7	
2/27/2022	17	60	9.1		185		16		41		62		1			13		308		164.0	
2/27/2022	18	60	9.3		190		14		25		44		1			14		311		161.7	
2/27/2022	19	60	9.0		180		17		31		44		2	1		14		312	309	166.7	164.5
2/27/2022	20	60	9.3		177		17		31		47		1			14		309		166.7	
2/27/2022	21	60	9.3		188		14		37		62		1			14		304		166.6	
2/27/2022	22	60	9.4		176		22		63		65		1			14		305		167.0	
2/27/2022	23	60	9.5		186		37		122		70		2	1		14	14	311	307	166.0	166.6

Average:
Geometric Mean Average:

Limit:

181	12
≤ 205 24-HR Block Avg.	≤ 29 24-HR Geometric Mean

OR

71
≥ 75% Removal Efficiency

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



Date 27-Feb-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	2	2	2	2	2	2	2	2	2	2
1	2	2	2	2	2	1	1	2	1	1	1
2	1	2	1	1	1	1	1	1	1	1	1
3	1	1	1	2	2	2	2	2	2	2	1
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	IC	6	IC	2	2	2	2	2	2	2
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	1	2	2	2	2	2	1
17	2	2	2	2	2	2	2	2	2	2	2
18	2	2	2	1	1	2	2	2	2	2	1
19	2	2	2	2	2	2	2	2	2	2	2
20	2	2	2	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1
22	1	2	1	2	1	2	2	2	2	2	1
23	2	2	2	2	2	2	2	2	2	2	2

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 27-Feb-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	2
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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