



COMPLIANCE SUMMARY REPORT

Date 1/16/22

Plant Wheelabrator North Andover
 Unit Unit 1
 Source Outlet

FMP

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.
1/16/2022	0	60	10.4		165		16		45		66		6			14		309		164.5	
1/16/2022	1	60	10.5		171		14		42		67		6			14		309		165.6	
1/16/2022	2	60	10.6		184		13		35		63		6			14		309		163.9	
1/16/2022	3	60	10.4		172		17		35		53		5	6		14		309	309	165.7	164.9
1/16/2022	4	60	10.4		172		16		34		52		5			14		309		167.1	
1/16/2022	5	60	10.4		177		9		19		55		5			14		309		167.6	
1/16/2022	6	60	10.3		178		7		26		72		5			14		309		166.7	
1/16/2022	7	60	10.6		174		11		27		59		5	5		14	14	309	309	165.8	166.8
1/16/2022	8	60	10.7		183		10		26		62		5			14		309		165.1	
1/16/2022	9	60	10.5		170		8		25		68		5			14		309		166.5	
1/16/2022	10	60	10.6		181		14		33		58		5			14		309		166.2	
1/16/2022	11	60	10.7		183		21		46		54		7	5		13		309	309	166.9	166.2
1/16/2022	12	60	10.8		181		11		24		54		5			14		309		164.4	
1/16/2022	13	60	10.6		178		9		23		62		5			13		309		164.8	
1/16/2022	14	60	10.6		182		12		26		55		5			13		309		164.8	
1/16/2022	15	60	10.6		171		9		22		61		5	5		14	14	309	309	163.6	164.4
1/16/2022	16	60	10.4		169		9		24		61		5			14		309		166.3	
1/16/2022	17	60	10.7		171		6		16		63		4			13		309		162.6	
1/16/2022	18	60	10.5		180		8		17		55		6			14		309		164.5	
1/16/2022	19	60	10.2		170		8		21		60		4	5		14		309	309	166.1	164.9
1/16/2022	20	60	10.5		170		11		24		54		4			15		309		164.6	
1/16/2022	21	60	10.6		165		12		26		54		4			14		309		165.0	
1/16/2022	22	60	10.6		173		15		28		47		4			14		309		164.5	
1/16/2022	23	46	13.1		216		10		16		38		126	35		14	14	308	309	130.5	156.1

Average:
Geometric Mean Average:

Limit:

176
≤ 205 24-HR Block Avg.

11
≤ 29 24-HR Geometric Mean

OR

59
≥ 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



COMPLIANCE SUMMARY REPORT

Date 1/16/22

Plant Wheelabrator North Andover
 Unit Unit 2
 Source Outlet

FMP

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
1/16/2022	0	60	9.3		182		9		61		85		2				13		310		166.4	
1/16/2022	1	60	9.4		175		3		42		92		2				13		310		165.3	
1/16/2022	2	60	9.3		179		6		52		88		2				14		310		166.3	
1/16/2022	3	60	9.3		168		4		41		90		2	2			13		312	311	165.2	165.8
1/16/2022	4	60	9.3		168		1		32		98		1				14		310		165.8	
1/16/2022	5	60	9.3		169		6		47		88		4				13		309		164.6	
1/16/2022	6	60	9.0		170		5		47		90		1				14		310		166.2	
1/16/2022	7	60	9.2		164		2		37		96		1	2		13	13	310	310	165.6	165.6	
1/16/2022	8	60	9.3		175		1		32		98		1				13		310		165.5	
1/16/2022	9	60	9.2		179		0		34		99		1				14		310		166.2	
1/16/2022	10	60	9.0		175		1		43		97		18				13		310		165.8	
1/16/2022	11	60	9.0		170		7		53		86		0	5			14		310	310	166.1	165.9
1/16/2022	12	60	8.9		171		1		38		96		0				14		310		166.2	
1/16/2022	13	60	8.9		154		3		42		94		0				13		310		165.9	
1/16/2022	14	60	8.9		167		3		39		92		0				9		310		166.1	
1/16/2022	15	60	8.8		167		1		34		97		0	0		14	13	310	310	165.6	165.9	
1/16/2022	16	60	8.8		165		2		33		95		0				15		310		166.0	
1/16/2022	17	60	8.8		165		1		28		98		0				15		310		165.2	
1/16/2022	18	60	9.0		176		3		34		93		1				15		310		164.8	
1/16/2022	19	60	8.8		177		2		35		94		1	1			15		310	310	166.3	165.6
1/16/2022	20	60	8.8		164		1		36		97		0				15		310		166.3	
1/16/2022	21	60	8.9		166		7		51		86		0				16		309		166.0	
1/16/2022	22	60	8.9		162		9		58		85		1				15		310		168.0	
1/16/2022	23	60	8.9		163		6		43		86		1	1		16	15	310	310	164.6	166.2	

Average:
Geometric Mean Average:

Limit:

170
≤ 205 24-HR Block Avg.

2
≤ 29 24-HR Geometric Mean

OR

94
≥ 75% Removal Efficiency

see above
≤ 69 ppmc 4-HR Block Average

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WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 16-Jan-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	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	2	IC	5	IC	1	1	1	1	1	1	2	
7	1	1	1	1	1	1	1	1	1	1	1	
8	1	1	2	1	1	1	1	2	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	1	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	1	1	1	1	1	1	1	1	1	
17	1	1	1	1	1	1	1	1	1	1	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	IF	1	IF	1

Status Flags

I - Invalid C - Calibration F - Offline T - Out of Control ^ - Startup
 B - Bad M - Maintenance P - Purge E - Excluded * - Shutdown



WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 16-Jan-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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