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

PERFORMANCE FOR THE PLANET

Date 7/16/24
NOTE: Emission & Process results may change after Startup, Shutdown, Malfunction data validation

Plant Wheelabrator North Andover
Unit Unit 1
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
7/16/2024	0	58	10.5		139		17		37		54		0				14		310		168.2	
7/16/2024	1	60	10.5		138		13		36		62		0				14		309		168.7	
7/16/2024	2	60	10.6		142		15		34		56		0				14		310		165.4	
7/16/2024	3	60	10.8		142		19		34		44		0		0		15		310	309	166.4	167.2
7/16/2024	4	60	10.8		146		14		42		67		0				14		309		166.2	
7/16/2024	5	60	10.7		138		17		33		48		0				15		309		168.1	
7/16/2024	6	60	10.7		144		3		16		80		0				14		310		164.7	
7/16/2024	7	60	11.0		137		12		30		58		0		0		14	14	309	309	166.2	166.3
7/16/2024	8	60	10.7		143		10		35		71		0				14		309		168.9	
7/16/2024	9	60	10.9		140		15		55		72		0				14		309		167.6	
7/16/2024	10	60	10.9		139		17		45		61		1				14		309		165.8	
7/16/2024	11	60	10.8		143		16		43		63		1		1		14		310	309	168.7	167.7
7/16/2024	12	60	10.8		141		18		51		65		0				14		309		167.5	
7/16/2024	13	60	10.9		142		22		59		62		0				15		310		165.5	
7/16/2024	14	60	10.8		140		8		36		77		0				14		309		165.9	
7/16/2024	15	60	10.5		142		2		29		93		0		0		14	14	310	310	165.4	166.1
7/16/2024	16	60	10.6		141		9		41		77		0				14		309		167.5	
7/16/2024	17	60	10.5		142		20		86		76		0				14		310		167.1	
7/16/2024	18	60	10.6		139		22		93		76		0				14		309		167.0	
7/16/2024	19	60	10.6		143		16		80		81		0		0		14		310	309	167.5	167.3
7/16/2024	20	60	10.6		139		10		55		82		0				14		309		166.5	
7/16/2024	21	37	10.8	IBF	143	IBF	9	IBF	51	IBF	82	IBF	0	IBF			14		312		161.1	
7/16/2024	22	6	16.9	IBF	203	IBF	8	IBF	87	IBF	91	IBF	1201	IBF			0		306		13.2	
7/16/2024	23	0	19.0	IF	359	IF	67	IF	54	IBF	0	IBF	1088	IF	0		0	14	288	310	24.7	163.8
Average:					141										see above		see above		see above		see above	
Geometric Mean Average:							13				71											
Limit:					≤ 150 24-HR Block Avg.		≤ 29 24-HR Geometric Mean		OR		≥ 80% Removal Efficiency				≤ 69 ppmc 4-HR Block Average		≥ 12 lb/hr 8-HR. Block Average		≤ 345 °F 4-HR Block Average		≤ 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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PERFORMANCE FOR THE PLANET

Date 7/16/24
NOTE: Emission & Process results may change after Startup, Shutdown, Malfunction data validation

Plant Wheelabrator North Andover
Unit Unit 2
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
7/16/2024	0	58	9.4		140		0		28		99		4				15		310		168.3	
7/16/2024	1	60	9.4		141		6		39		85		4				15		310		167.2	
7/16/2024	2	60	9.6		140		7		36		80		4				15		310		164.7	
7/16/2024	3	60	9.6		139		7		31		79		4		4		15		310	310	165.6	166.5
7/16/2024	4	60	9.5		137		10		42		77		5				15		310		167.9	
7/16/2024	5	60	9.5		140		14		39		64		5				14		310		168.1	
7/16/2024	6	60	9.5		140		2		17		89		5				14		310		166.1	
7/16/2024	7	60	9.4		141		3		25		88		5		5		13	15	310	310	168.5	167.7
7/16/2024	8	60	9.6		137		7		8		12		5				14		310		167.8	
7/16/2024	9	60	9.4		141		5		7		31		5				14		310		167.5	
7/16/2024	10	60	9.4		140		2		9		80		5				14		310		167.6	
7/16/2024	11	60	9.3		137		1		12		94		5		5		14		310	310	168.2	167.8
7/16/2024	12	60	9.3		142		11		30		64		4				15		310		168.0	
7/16/2024	13	60	9.3		138		13		33		61		5				14		310		168.0	
7/16/2024	14	60	8.9		142		4		30		85		5				14		311		165.7	
7/16/2024	15	60	9.0		139		2		25		94		5		5		15	14	310	310	167.4	167.3
7/16/2024	16	60	8.8		139		0		26		100		5				15		310		167.1	
7/16/2024	17	60	8.8		137		3		61		96		5				15		310		167.9	
7/16/2024	18	60	9.0		141		15		96		84		5				16		310		167.5	
7/16/2024	19	60	9.1		141		3		74		96		5		5		13		310	310	167.7	167.6
7/16/2024	20	60	9.2		139		6		78		92		4				15		310		167.6	
7/16/2024	21	6	9.2	IF	147	IF	9	IF	84	IBF	89	IBF	4	IF			14		310		166.0	
7/16/2024	22																					
7/16/2024	23	11	8.4	IBF	103	IBF	10	IBF	22	IBF	52	IBF	65	IBF	4		13	15	267	310	26.4	167.6

Average:	140			see above	see above	see above	see above
Geometric Mean Average:		3					
Limit:	≤ 150 24-HR Block Avg.	≤ 29 24-HR Geometric Mean	**OR** ≥ 80% Removal Efficiency	≤ 69 ppmc 4-HR Block Average	≥ 12 lb/hr 8-HR. Block Average	≤ 345 °F 4-HR Block Average	≤ 173 klb/hr 4-HR Block Average

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WHEELABRATOR NORTH ANDOVER
A WIN-WASTE INNOVATIONS COMPANY
OPACITY REPORT

Date 16-Jul-2024

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	I	1	I	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		1		1		1
7	1		1		1		1		1		1		1		1		1		1		1
8	1		1		1		1		1		1		1		1		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	I	0		0		0		1	IF	1
22	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	0	IF	1	IF	0	IF	0
23	1	IF	1	IF	1	IF	1	IF	1	IF	1	IF	1	IF	1	IF	1	IF	1	IF	1

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OPACITY REPORT

Date 16-Jul-2024

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	I	2	I	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	1	IC	6	IC	2	2	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	1	1		2	2
20	1		1		1	2	2	2	2	2	2		2	2
21	2		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	1	I	0	0

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