American Municipal Power Generating Station
Main Boilers (B001 and B002)
(All Values are Per Boiler)

Parameter	Maximum	Notes
Heat Input Rating (MMBtu/hr)	5,191	Design
Coal Usage Rate (tons/hr)	317	Maximum Requirement for Lowest Btu Coal Supply
Stack Height (ft)	625	Less than GEP stack height. GEP stack height is 675 feet based on a building height of 270 feet and a building width of 502 feet. (270 + 1.5 x 270 = 675)
Stack Diameter (ft)	24.76	Design
Class II Analysis Flow Rate (ACFM)	1,528,423	Minimum flowrate and velocity used for "worst case" Class II impact.
Class II Analysis Velocity (fps)	52.9	
Class I Analysis Flow Rate (ACFM)	1,738,204	Maximum flowrate and velocity used for "worst case" Class I impact.
Class I Analysis Velocity (fps)	60.2	
Stack Gas Exit Temp (F)	135	Design
SO_2 3-Hour Average (Used for Class II PSD/NAAQS & Class I PSD)		
SO_2-lbs/MMBtu	0.24	Engineering Estimate
SO_2-lbs/hr	1,246	Calculated as lb/MMBTU x Max Heat Input.
SO_2 24-Hour Average (Used for Class II PSD/NAAQS & Class I PSD/Visibility)		
SO_2-lbs/MMBtu	0.184	Engineering Estimate
SO_2-lbs/hr	955	Calculated as lb/MMBtu x Max Heat Input.
SO_2 Annual Average (Used for Class II PSD/NAAQS & Class I PSD/Deposition)		
SO_2-lbs/MMBtu	0.150	Engineering Estimate
SO_2-lbs/hr	779	Calculated as lb/MMBtu x Max Heat Input.
SO_2-tons/yr	3,410	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
NO_x 24-Hour Average (Used for Class I Visibility)		
NO_X-lbs/MMBtu	0.10	Engineering Estimate
NO_X-lbs/hr	519	Calculated as maximum lb/MMBtu x Max Heat Input
NO_x Annual Average (Used for Class II PSD & Class I PSD/Deposition)		
NO_X-lbs/MMBtu	0.07	Engineering Estimate
NO_X-lbs/hr	363	Calculated as maximum lb/MMBtu x Max Heat Input
NO_X-tons/yr	1,592	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
PM_{10} 24-Hour Average (Filterable Only)		
PM_{10}-lbs/MMBtu	0.015	Engineering Estimate
PM_{10}-lbs/hr	78	Calculated as maximum lb/MMBtu x Max Heat Input
PM_{10} Annual Average (Filterable Only)		
PM_{10}-lbs/MMBtu	0.015	Engineering Estimate
PM_{10}-lbs/hr	78	Calculated as maximum lb/MMBtu x Max Heat Input
PM_{10}-tons/yr	341	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
PM_{10} 24-Hour Average (Filterable + Condensable = Used for Class II PSD/NAAQS & Class I PSD/Visibility)		
PM_{10}-lbs/MMBtu	0.025	Engineering Estimate
PM_{10}-lbs/hr	129	Calculated as maximum lb/MMBtu x Max Heat Input
PM_{10} Annual Average (Filterable + Condensable = Used for Class II PSD/NAAQS & Class I PSD)		
PM_{10}-lbs/MMBtu	0.025	Engineering Estimate
PM_{10}-lbs/hr	129	Calculated as maximum lb/MMBtu x Max Heat Input
PM_{10}-tons/yr	566	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
CO 1-Hour Average (Used for Class II PSD/NAAQS)		
CO-lbs/MMBtu	0.154	Engineering Estimate
CO-lbs/hr	799	Calculated as maximum lb/MMBtu x Max Heat Input
CO-tons/yr	3,501	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
CO 8-Hour Average (Used for Class II PSD/NAAQS)		
CO-lbs/MMBtu	0.154	Engineering Estimate
CO-lbs/hr	799	Calculated as maximum lb/MMBtu x Max Heat Input
CO-tons/yr	3,501	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs

American Municipal Power Generating Station
Main Boilers (B001 and B002)
(All Values are Per Boiler)

Parameter	Maximum	Notes
Pb Quarterly Average (No air quality modeling required < 0.6 tpy for the AMP project)		
Pb-lbs/MMBtu	0.00000982	Calculated as lb/hr / Max Heat Input
Pb-lbs/hr	0.051	Engineering Estimate
Pb-tons/yr	0.22	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
VOC (No air quality modeling required)		
VOC-lbs/MMBtu	0.0037	Engineering Estimate
VOC-lbs/hr	19.0	Calculated as maximum lb/MMBtu x Max Heat Input
VOC-tons/yr	83.2	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
H_2SO_4 1 hour average (Used for air toxic analysis and as a component of condensable PM_{10})		
H_2SO_4-lbs/MMBtu	0.0075	Engineering Estimate
H_2SO_4-lbs/hr	38.9	Calculated as maximum lb/MMBtu x Max Heat Input
H_2SO_4-tons/yr	170.5	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Hg 1 hour average (HAP Used for air toxic analysis)		
Hg-lbs/TrillionBtu	1.9	Limit in PTI No. 06-08138 (2/7/08)
Hg-lbs/hr	0.0099	Calculated as maximum lb/Trillion Btu x Max Heat Input
Hg-tons/yr	0.043	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
HF (Used for air toxic analysis)		
HF-lbs/MMBtu	0.00102	Engineering Estimate
HF-lbs/hr	5.3	Calculated as maximum lb/MMBtu x Max Heat Input
HF-tons/yr	23.2	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
NH_3-Slip (Used for air toxic analysis)		
NH_3-lb/MMBTU	0.00098	Calculated as maximum lb/hr / Max Heat Input
NH_3-lbs/hr	5.1	Engineering Estimate
NH_3-tons/yr	22.3	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
N_2O (Used for air toxic analysis)		
N_2O-lbs/MMBtu	0.005	Engineering Estimate
N_2O-lbs/hr	26.0	Calculated as maximum lb/MMBtu x Max Heat Input
N_2O-tons/yr	113.7	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
HCl (HAP Used for air toxic analysis)		
HCl-lbs/MMBtu	0.00793	Engineering Estimate
HCl-lbs/hr	41.2	Calculated as maximum lb/MMBtu x Max Heat Input
HCl-tons/yr	180.3	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
$(NH_4)_2SO_4$ (No air quality modeling required-not an "air toxic" - Used as a component of condensable PM_{10})		
$(NH_4)_2SO_4$-lbs/MMBtu	0.00240	Engineering Estimate
$(NH_4)_2SO_4$-lbs/hr	12.5	Calculated as maximum lb/MMBtu x Max Heat Input
$(NH_4)_2SO_4$-tons/yr	54.6	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Cyanide (HAP Used for air toxic analysis)		
Cyanide-lbs/ton	0.0025	Emission factors from AP-42 Tables 1.1-14 (9/98)
Cyanide-lbs/hr	0.79	Calculated as maximum lb/ton x maximum coal usage
Cyanide-tons/yr	3.47	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Benzene (HAP Used for air toxic analysis)		
Benzene-lbs/ton	0.0013	Emission factors from AP-42 Tables 1.1-14 (9/98)
Benzene-lbs/hr	0.41	Calculated as maximum lb/ton x maximum coal usage
Benzene-tons/yr	1.80	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Benzyl Chloride (HAP Used for air toxic analysis)		
Benzyl Chloride-lbs/ton	0.0007	Emission factors from AP-42 Tables 1.1-14 (9/98)
Benzyl Chloride-lbs/hr	0.22	Calculated as maximum lb/ton x maximum coal usage
Benzyl Chloride-tons/yr	0.97	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Isophorone (HAP Used for air toxic analysis)		
Isophorone-lbs/ton	0.00058	Emission factors from AP-42 Tables 1.1-14 (9/98)
Isophorone-lbs/hr	0.18	Calculated as maximum lb/ton x maximum coal usage
Isophorone-tons/yr	0.81	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs

American Municipal Power Generating Station
Main Boilers (B001 and B002)
(All Values are Per Boiler)

Parameter	Maximum	Notes
Acetaldehyde (HAP Used for air toxic analysis)		
Acetaldehyde-lbs/ton	0.00057	Emission factors from AP-42 Tables 1.1-14 (9/98)
Acetaldehyde-lbs/hr	0.18	Calculated as maximum lb/ton x maximum coal usage
Acetaldehyde-tons/yr	0.79	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Methyl Chloride (HAP Used for air toxic analysis)		
Methyl chloride-lbs/ton	0.00053	Emission factors from AP-42 Tables 1.1-14 (9/98)
Methyl chloride-lbs/hr	0.17	Calculated as maximum lb/ton x maximum coal usage
Methyl chloride-tons/yr	0.74	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Methyl Ethyl Ketone (HAP Used for air toxic analysis)		
Methyl Ethyl Ketone-lbs/ton	0.00039	Emission factors from AP-42 Tables 1.1-14 (9/98)
Methyl Ethyl Ketone-lbs/hr	0.12	Calculated as maximum lb/ton x maximum coal usage
Methyl Ethyl Ketone-tons/yr	0.54	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs
Propionaldehyde (HAP Used for air toxic analysis)		
Propionaldehyde-lbs/ton	0.00038	Emission factors from AP-42 Tables 1.1-14 (9/98)
Propionaldehyde-lbs/hr	0.12	Calculated as maximum lb/ton x maximum coal usage
Propionaldehyde-tons/yr	0.53	Calculated as lb/hr x 8,760 hours/yr x 1 ton/2,000 lbs

AMP-Ohio
AMPGS
Maximum Hourly and Annual HAP Emissions from Primary Boilers (B001 and B002)

Coal Usage Rate (tons/hr) (two boilers combined @ 100% load)	634

Contaminant	Emission Factor (lb/ton) [1]	Maximum Hourly Emissions at 100% Load (lb/hr)	Both Boilers Maximum Annual Emissions at 100% Load (tpy)	Each Boiler Maximum Annual Emissions at 100% Load (tpy)	Each Boiler Maximum Annual Emissions at 100% Load (lb/yr)
Cyanide	0.00250	1.59	6.9	3.47	6,942
Benzene	0.00130	0.82	3.6	1.80	3,610
Benzyl chloride	0.00070	0.44	1.9	0.97	1,944
Isophorone	0.00058	0.37	1.6	0.81	1,611
Acetaldehyde	0.00057	0.36	1.6	0.79	1,583
Methyl chloride	0.00053	0.34	1.5	0.74	1,472
Methyl ethyl ketone	0.00039	0.25	1.1	0.54	1,083
Propionaldehyde	0.00038	0.24	1.1	0.53	1,055
HAPs above this row > 1.0 TPY included in the original PTI application					
Acrolein	0.00029	0.18	0.81	0.40	805.3
Methylene chloride	0.00029	0.18	0.81	0.40	805.3
Formaldehyde	0.00024	0.15	0.67	0.33	666.5
Toluene	0.00024	0.15	0.67	0.33	666.5
Methyl hydrazine	0.00017	0.11	0.47	0.24	472.1
Methyl bromide	0.00016	0.10	0.44	0.22	444.3
Carbon disulfide	0.00013	0.08	0.36	0.18	361.0
Ethyl benzene	0.000094	0.06	0.26	0.13	261.0
Bis(2-ethylhexyl)phthalate(DEHP)	0.000073	0.05	0.20	0.10	202.7
Hexane	0.000067	0.04	0.19	0.09	186.1
Chloroform	0.000059	0.04	0.16	0.08	163.8
Dimethyl sulfate	0.000048	0.03	0.13	0.07	133.3
Tetrachloroethylene	0.000043	0.03	0.12	0.06	119.4
Ethyl chloride	0.000042	0.03	0.12	0.06	116.6
Ethylene dichloride	0.000040	0.03	0.11	0.06	111.1
Bromoform	0.000039	0.02	0.11	0.05	108.3
Xylenes	0.000037	0.02	0.10	0.05	102.7
Methyl tert butyl ether	0.000035	0.02	0.10	0.05	97.2
Styrene	0.000025	0.02	0.07	0.03	69.4
Chlorobenzene	0.000022	0.01	0.06	0.03	61.1
Methyl methacrylate	0.000020	0.01	0.06	0.03	55.5
1,1,1-Trichloroethane	0.000020	0.01	0.06	0.03	55.5
Phenol	0.000016	0.01	0.04	0.02	44.4
Acetophenone	0.000015	0.01	0.04	0.02	41.7
Naphthalene	0.000013	0.01	0.04	0.02	36.1
Vinyl acetate	0.0000076	0.005	0.02	0.01	21.1
2-Chloroacetophenone	0.0000070	0.004	0.02	0.01	19.4
Cumene	0.0000053	0.003	0.015	0.007	14.7
HAPs below this row < 10 lb/yr per boiler					
Phenanthrene	0.0000027	0.002	0.007	0.004	7.50
Biphenyl	0.0000017	0.001	0.005	0.002	4.72
Ethylenedibromide	0.0000012	0.001	0.003	0.002	3.33
Fluorene	0.00000091	0.001	0.003	0.001	2.53
Fluoranthene	0.00000071	0.0005	0.002	0.001	1.97
Acenaphthene	0.00000051	0.0003	0.001	0.001	1.42
Pyrene	0.00000033	0.0002	0.0009	0.0005	0.92
2,4-Dinitrotoluene	0.00000028	0.0002	0.0008	0.0004	0.78
Acenaphthylene	0.00000025	0.0002	0.0007	0.0003	0.69
Anthracene	0.00000021	0.0001	0.0006	0.0003	0.58
Benzo(b,j,k)fluoranthene	0.00000011	0.0001	0.0003	0.0002	0.31
Chrysene	0.0000001	0.0001	0.0003	0.0001	0.28
Benzo(a)anthracene	0.00000008	0.0001	0.0002	0.0001	0.22
Indeno(1,2,3-cd)pyrene	0.000000061	0.00004	0.0002	0.00008	0.17
Benzo(a)pyrene	0.000000038	0.00002	0.0001	0.00005	0.11
Benzo(g,h,i)perylene	0.000000027	0.00002	0.00007	0.00004	0.07
5-Methyl chrysene	0.000000022	0.00001	0.00006	0.00003	0.06

AMP-Ohio
AMPGS
Maximum Hourly and Annual HAP Emissions from Primary Boilers (B001 and B002)

Coal Usage Rate (tons/hr) (two boilers combined @ 100% load)	634

Contaminant	Emission Factor (lb/ton) [1]	Maximum Hourly Emissions at 100% Load (lb/hr)	Both Boilers Maximum Annual Emissions at 100% Load (tpy)	Each Boiler Maximum Annual Emissions at 100% Load (tpy)	Each Boiler Maximum Annual Emissions at 100% Load (lb/yr)
Total TCDD	0.0000000004	0.0000002	0.000001	0.000001	0.001
Total PeCDD	0.000000001	0.0000004	0.000002	0.000001	0.002
Total HxCDD	0.000000003	0.0000019	0.00001	0.000004	0.01
Total HpCDD	0.000000010	0.00001	0.00003	0.00001	0.03
Total OCDD	0.000000029	0.00002	0.00008	0.00004	0.08
Total PCDD	0.000000043	0.00003	0.00012	0.00006	0.12
Total TCDF	0.000000002	0.000002	0.00001	0.00000	0.01
Total PeCDF	0.000000005	0.000003	0.00001	0.00001	0.01
Total HxCDF	0.000000013	0.00001	0.00004	0.00002	0.04
Total HpCDF	0.000000044	0.00003	0.00012	0.00006	0.12
Total OCDF	0.000000137	0.0001	0.00038	0.0002	0.38
Total PCDF	0.000000201	0.0001	0.00056	0.0003	0.56
TOTAL PCDD + PCDF	0.000000244	0.0002	0.00068	0.0003	0.68

[1] Emission factors from AP-42 Tables 1.1-12, 1.1-13, 1.1-14