WinCup Tolleson AZ
HAP Potential to Emit Calculations

Boiler B001 Maximum fuel input 179.49 10^6 cf/year

Hazardous Air Pollutants from Natural Gas Combustion			
Pollutant	**CAS #**	**Emission Factor**	**Maximum Potential Emissions**
		lb/10^6 cf	tons/yr
2-Methylnaphthalene	91-57-6	2.4E-05	**0.00000**
3-Methylchloranthrene	56-49-5	1.8E-06	**0.00000**
7,12-Dimethylbenz(a)anthracene		1.6E-05	**0.00000**
Acenaphthene	83-32-9	1.8E-06	**0.00000**
Acenaphthylene	203-96-8	1.8E-06	**0.00000**
Anthracene	120-12-7	2.4E-06	**0.00000**
Benz(a)anthracene	56-55-3	1.8E-06	**0.00000**
Benzene	71-43-2	2.1E-03	**0.00019**
Benzo(a)pyrene	50-32-8	1.2E-06	**0.00000**
Benzo(b)fluoranthene	205-99-2	1.8E-06	**0.00000**
Benzo(g,h,i)perylene	191-24-2	1.2E-06	**0.00000**
Benzo(k)fluoranthene	205-82-3	1.8E-06	**0.00000**
Chrysene	218-01-9	1.8E-06	**0.00000**
Dibenzo(a,h)anthracene	53-70-3	1.2E-06	**0.00000**
Dichlorobenzene	25321-22-6	1.2E-03	**0.00011**
Fluoranthene	206-44-0	3.0E-06	**0.00000**
Fluorene	86-73-7	2.8E-06	**0.00000**
Formaldehyde	50-00-0	7.5E-02	**0.00673**
Hexane	110-54-3	1.8E+00	**0.16154**
Indeno(1,2,3-cd)pyrene	193-39-5	1.8E-06	**0.00000**
Naphthalene	91-20-3	6.1E-04	**0.00005**
Phenanathrene	85-01-8	1.7E-05	**0.00000**
Pyrene	129-00-0	5.0E-06	**0.00000**
Toluene	108-88-3	3.4E-03	**0.00031**
Arsenic	7440-38-2	2.0E-04	**0.00002**
Beryllium	7440-41-7	1.2E-05	**0.00000**
Cadmium	7440-43-9	1.1E-03	**0.00010**
Chromium	7440-47-3	1.4E-03	**0.00013**
Cobalt	7440-48-4	8.4E-05	**0.00001**
Manganese	7439-96-5	3.8E-04	**0.00003**
Mercury	7439-97-6	2.6E-04	**0.00002**
Nickel	7440-02-0	2.1E-03	**0.00019**
Selenium	7782-49-2	2.4E-05	**0.00000**

Boiler HAP emission factors are from AP-42, 5th edition,
Chapter 1, Supplement D (July 1998), Table 1.4-3, p. 1.4-8

Boiler B002 Maximum fuel input 179.49 10^6 cf/year

Hazardous Air Pollutants from Natural Gas Combustion			
Pollutant	**CAS #**	**Emission Factor**	**Maximum Potential Emissions**
		lb/10^6 cf	tons/yr
2-Methylnaphthalene	91-57-6	2.4E-05	**0.00000**
3-Methylchloranthrene	56-49-5	1.8E-06	**0.00000**
7,12-Dimethylbenz(a)anthracene		1.6E-05	**0.00000**
Acenaphthene	83-32-9	1.8E-06	**0.00000**
Acenaphthylene	203-96-8	1.8E-06	**0.00000**
Anthracene	120-12-7	2.4E-06	**0.00000**
Benz(a)anthracene	56-55-3	1.8E-06	**0.00000**
Benzene	71-43-2	2.1E-03	**0.00019**
Benzo(a)pyrene	50-32-8	1.2E-06	**0.00000**
Benzo(b)fluoranthene	205-99-2	1.8E-06	**0.00000**
Benzo(g,h,i)perylene	191-24-2	1.2E-06	**0.00000**
Benzo(k)fluoranthene	205-82-3	1.8E-06	**0.00000**
Chrysene	218-01-9	1.8E-06	**0.00000**
Dibenzo(a,h)anthracene	53-70-3	1.2E-06	**0.00000**
Dichlorobenzene	25321-22-6	1.2E-03	**0.00011**
Fluoranthene	206-44-0	3.0E-06	**0.00000**
Fluorene	86-73-7	2.8E-06	**0.00000**
Formaldehyde	50-00-0	7.5E-02	**0.00673**
Hexane	110-54-3	1.8E+00	**0.16154**
Indeno(1,2,3-cd)pyrene	193-39-5	1.8E-06	**0.00000**
Naphthalene	91-20-3	6.1E-04	**0.00005**
Phenanathrene	85-01-8	1.7E-05	**0.00000**
Pyrene	129-00-0	5.0E-06	**0.00000**
Toluene	108-88-3	3.4E-03	**0.00031**
Arsenic	7440-38-2	2.0E-04	**0.00002**
Beryllium	7440-41-7	1.2E-05	**0.00000**
Cadmium	7440-43-9	1.1E-03	**0.00010**
Chromium	7440-47-3	1.4E-03	**0.00013**
Cobalt	7440-48-4	8.4E-05	**0.00001**
Manganese	7439-96-5	3.8E-04	**0.00003**
Mercury	7439-97-6	2.6E-04	**0.00002**
Nickel	7440-02-0	2.1E-03	**0.00019**
Selenium	7782-49-2	2.4E-05	**0.00000**

Boiler HAP emission factors are from AP-42, 5th edition,
Chapter 1, Supplement D (July 1998), Table 1.4-3, p. 1.4-8

Boiler B003 Maximum fuel input 180.35 10^6 cf/year

Hazardous Air Pollutants from Natural Gas Combustion			
Pollutant	**CAS #**	**Emission Factor**	**Maximum Potential Emissions**
		lb/10^6 cf	tons/yr
2-Methylnaphthalene	91-57-6	2.4E-05	**0.00000**
3-Methylchloranthrene	56-49-5	1.8E-06	**0.00000**
7,12-Dimethylbenz(a)anthracene		1.6E-05	**0.00000**
Acenaphthene	83-32-9	1.8E-06	**0.00000**
Acenaphthylene	203-96-8	1.8E-06	**0.00000**
Anthracene	120-12-7	2.4E-06	**0.00000**
Benz(a)anthracene	56-55-3	1.8E-06	**0.00000**
Benzene	71-43-2	2.1E-03	**0.00019**
Benzo(a)pyrene	50-32-8	1.2E-06	**0.00000**
Benzo(b)fluoranthene	205-99-2	1.8E-06	**0.00000**
Benzo(g,h,i)perylene	191-24-2	1.2E-06	**0.00000**
Benzo(k)fluoranthene	205-82-3	1.8E-06	**0.00000**
Chrysene	218-01-9	1.8E-06	**0.00000**
Dibenzo(a,h)anthracene	53-70-3	1.2E-06	**0.00000**
Dichlorobenzene	25321-22-6	1.2E-03	**0.00011**
Fluoranthene	206-44-0	3.0E-06	**0.00000**
Fluorene	86-73-7	2.8E-06	**0.00000**
Formaldehyde	50-00-0	7.5E-02	**0.00676**
Hexane	110-54-3	1.8E+00	**0.16232**
Indeno(1,2,3-cd)pyrene	193-39-5	1.8E-06	**0.00000**
Naphthalene	91-20-3	6.1E-04	**0.00006**
Phenanathrene	85-01-8	1.7E-05	**0.00000**
Pyrene	129-00-0	5.0E-06	**0.00000**
Toluene	108-88-3	3.4E-03	**0.00031**
Arsenic	7440-38-2	2.0E-04	**0.00002**
Beryllium	7440-41-7	1.2E-05	**0.00000**
Cadmium	7440-43-9	1.1E-03	**0.00010**
Chromium	7440-47-3	1.4E-03	**0.00013**
Cobalt	7440-48-4	8.4E-05	**0.00001**
Manganese	7439-96-5	3.8E-04	**0.00003**
Mercury	7439-97-6	2.6E-04	**0.00002**
Nickel	7440-02-0	2.1E-03	**0.00019**
Selenium	7782-49-2	2.4E-05	**0.00000**

Boiler HAP emission factors are from AP-42, 5th edition,
Chapter 1, Supplement D (July 1998), Table 1.4-3, p. 1.4-8

EPS maximum throughput 20.00 10^6 lbs/year

Hazardous Air Pollutants from EPS processing			
Pollutant	**CAS #**	**Emission Factor**	**Maximum Potential Emissions**
		lb/10^6 lb	tons/yr
Styrene	100-42-5	2.50E+01	**0.25000**

EPS HAP emission factor is from supplier's materials composition data

Fire Pump

Maximum fuel input 2,158 10^6 Btu/year

Hazardous Air Pollutants from Diesel Fuel Combustion			
Pollutant	**CAS #**	**Emission Factor**	**Maximum Potential Emissions**
		lb/10^6 Btu	tons/yr
Benzene	71-43-2	9.33E-04	**0.00101**
Toluene	108-88-3	4.09E-04	**0.00044**
Xylenes	1330-20-7	2.85E-04	**0.00031**
1,3 Butadiene	106-99-0	3.91E-05	**0.00004**
Formaldehyde	50-00-0	1.18E-03	**0.00127**
Acetaldehyde	75-07-0	7.67E-04	**0.00083**
Acrolein	107-02-8	9.25E-05	**0.00010**
Naphthalene	91-20-3	8.48E-05	**0.00009**

Fire Pump HAP emission factors are from AP-42, 5th edition,
Chapter 3, Supplement B (October 1996) Table 3.3-2, p. 3.3-7

Parts Washer

Maximum Solvent Throughput 154 lbs/year

Hazardous Air Pollutants from Solvent Use			
Pollutant	CAS	WT%	**tons/yr**
Dichlorobenzene(p), 1,4-	106-46-7	0.2	**0.00015**
Napthalene	91-20-3	6	**0.00462**
Methylene chloride	75-09-2	0.2	**0.00015**

Solvent HAP emissions are from solvent MSDS

Summary of Site Wide HAPs emissions

Pollutant	CAS #	Maximum Potential Emissions	
		lbs/hr	tons/yr
2-Methylnaphthalene	91-57-6	1.48E-06	0.00001
3-Methylchloranthrene	56-49-5	1.11E-07	0.00000
7,12-Dimethylbenz(a)anthracene		9.85E-07	0.00000
Acenaphthene	83-32-9	1.11E-07	0.00000
Acenaphthylene	203-96-8	1.11E-07	0.00000
Anthracene	120-12-7	1.48E-07	0.00000
Benz(a)anthracene	56-55-3	1.11E-07	0.00000
Benzene	71-43-2	3.59E-04	0.00157
Benzo(a)pyrene	50-32-8	7.39E-08	0.00000
Benzo(b)fluoranthene	205-99-2	1.11E-07	0.00000
Benzo(g,h,i)perylene	191-24-2	7.39E-08	0.00000
Benzo(k)fluoranthene	205-82-3	1.11E-07	0.00000
Chrysene	218-01-9	1.11E-07	0.00000
Dibenzo(a,h)anthracene	53-70-3	7.39E-08	0.00000
Dichlorobenzene	25321-22-6	7.39E-05	0.00032
Fluoranthene	206-44-0	1.85E-07	0.00000
Fluorene	86-73-7	1.72E-07	0.00000
Formaldehyde	50-00-0	3.01E-02	0.02150
Hexane	110-54-3	1.11E-01	0.48541
Indeno(1,2,3-cd)pyrene	193-39-5	1.11E-07	0.00000
Naphthalene	91-20-3	1.11E-03	0.00488
Phenanathrene	85-01-8	1.05E-06	0.00000
Pyrene	129-00-0	3.08E-07	0.00000
Toluene	108-88-3	3.10E-04	0.00136
Arsenic	7440-38-2	1.23E-05	0.00005
Beryllium	7440-41-7	7.39E-07	0.00000
Cadmium	7440-43-9	6.77E-05	0.00030
Chromium	7440-47-3	8.62E-05	0.00038
Cobalt	7440-48-4	5.17E-06	0.00002
Manganese	7439-96-5	2.34E-05	0.00010
Mercury	7439-97-6	1.60E-05	0.00007
Nickel	7440-02-0	1.29E-04	0.00057
Selenium	7782-49-2	1.48E-06	0.00001
Styrene	100-42-5	5.71E-02	0.25000
Xylenes	1330-20-7	7.02E-05	0.00031
1,3 Butadiene	106-99-0	9.63E-06	0.00004
Acetaldehyde	75-07-0	1.89E-04	0.00083
Acrolein	107-02-8	2.28E-05	0.00010
Dichlorobenzene(p), 1,4-	106-46-7	3.52E-05	0.00015
Methylene chloride	75-09-2	3.52E-05	0.00015
Site Wide Total of all HAPS		**1.75E-01**	**0.76815**

Pounds per hour emissions are based upon a calculation of tons per year divided by 8,760 operating hours per year and do not represent a limit on the hourly emissions