

Council Bluffs Energy Center
 Title V Actual Emissions
 For the Year

2006

CEMS Values

Tons SOx 1389.50
 Tons NOx 815
 lbs/mmBtu CO 0.502954

Emission Point	001 Coal				Natural Gas				001 Pollutant	Total Tons/Yr
	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr		
Actual Throughput	239,111.00 Tons 8347 Ave Btu/lb				9.65 MMcf					
PM2.5	3.7700E-02	lb/mmBtu	0.00	75.24	7.60E+00	lb/MMcf	0.00	0.04	PM2.5	75.28
PM10	9.4000E-02	lb/mmBtu	0.00	187.61	7.60E+00	lb/MMcf	0.00	0.04	PM10	187.65
PM	1.3000E-01	lb/mmBtu	0.00	259.46	7.60E+00	lb/MMcf	0.00	0.04	PM	259.50
SOx		CEM Value		1,389.50	CEM	CEM			SOx	1,389.50
NOx		CEM Value		815.00	CEM	CEM			NOx	815.00
VOC	6.0000E-02	lb/ton		7.17	5.50E+00	lb/MMcf		0.03	VOC	7.20
CO	5.0295E-01	lb/mmBtu	CEM	1,003.83	8.40E+01	lb/MMcf		0.41	CO	1,004.23
Lead	NA								Lead	0.00
Ammonia	5.6500E-04	lb/ton		0.07	3.20E+00	lb/MMcf		0.02	7664417 Ammonia	0.08
Antimony	1.8000E-05	lb/ton		0.00					7440360 Antimony	0.00
Arsenic compounds	4.1000E-04	lb/ton		0.05					7440382 Arsenic cor	0.05
Beryllium compounds	2.1000E-05	lb/ton		0.00					7440417 Beryllium c	0.00
Cadmium compounds	5.1000E-05	lb/ton		0.01					7440439 Cadmium c	0.01
Chromium compounds	3.3900E-04	lb/ton		0.04					7440473 Chromium	0.04
Cobalt	1.0000E-04	lb/ton		0.01					7440484 Cobalt	0.01
Cyanide	2.5000E-03	lb/ton		0.30					Cyanide	0.30
Hydrochloric acid	1.2997E-01	lb/ton		15.54					7647010 Hydrochlori	15.54
Hydrogen fluoride	6.9112E-02	lb/ton		8.26					7664393 Hydrogen fi	8.26
Lead compounds	4.2000E-04	lb/ton		0.05					Lead comp	0.05
Manganese compounds	4.9000E-04	lb/ton		0.06					7439965 Manganese	0.06
Mercury compounds	1.0663E-04	lb/ton		0.01					7439976 Mercury co	0.01
Nickel compounds	2.8000E-04	lb/ton		0.03					7440020 Nickel com	0.03
POM	2.0800E-06	lb/mmBtu		0.00					POM	0.00
Radionuclides	9.5000E-02	lb/ton PM		0.01					Radionuclid	0.01
Selenium compounds	1.3000E-03	lb/ton		0.16					7782492 Selenium c	0.16
Acetaldehyde	5.7000E-04	lb/ton		0.07					75070 Acetaldehy	0.07
Acetophenone	1.5000E-05	lb/ton		0.00					98862 Acetophenu	0.00
Acrolein	2.9000E-04	lb/ton		0.03					107028 Acrolein	0.03
Benzene	1.3000E-03	lb/ton		0.16					71432 Benzene	0.16
Benzyl Chloride	7.0000E-04	lb/ton		0.08					100447 Benzyl Chlc	0.08
Di(2-ethylhexyl)phthalate	7.3000E-05	lb/ton		0.01					117817 Di(2-ethylh	0.01
Bromoform	3.9000E-05	lb/ton		0.00					75252 Bromoform	0.00
Carbon Disulfide	1.3000E-04	lb/ton		0.02					75150 Carbon Dis	0.02
2-Chloroacetophenone	7.0000E-06	lb/ton		0.00					532574 2-Chloroac	0.00
Chlorobenzene	2.2000E-05	lb/ton		0.00					108907 Chlorobenz	0.00
Chloroform	5.9000E-05	lb/ton		0.01					67663 Chloroform	0.01
Cumene	5.3000E-06	lb/ton		0.00					98828 Cumene	0.00
Dimethyl Sulfate	4.8000E-05	lb/ton		0.01					77781 Dimethyl Si	0.01

Ethylbenzene	9.4000E-05 lb/ton	0.01			100414 Ethylbenze	0.01
Chloroethane	4.2000E-05 lb/ton	0.01			75003 Chloroetha	0.01
1,2-Dichloroethane	4.0000E-05 lb/ton	0.00			107062 1,2-Dichloro	0.00
Formaldehyde	2.4000E-04 lb/ton	0.03	7.5000E-02 lb/MMcf	0.00	50000 Formaldehy	0.03
Hexane	6.7000E-05 lb/ton	0.01	1.8000E+00 lb/MMcf	0.01	110543 Hexane	0.02
Isophorone	5.8000E-04 lb/ton	0.07			78591 Isophorone	0.07
Methyl Tert Butyl Ether	3.5000E-05 lb/ton	0.00			1634044 Methyl Tert	0.00
Bromomethane	1.6000E-04 lb/ton	0.02			74839 Bromometr	0.02
Methyl Chloride	5.3000E-04 lb/ton	0.06			74873 Methyl Chlc	0.06
Methyl Ethyl Ketone	3.9000E-04 lb/ton	0.05			78933 Methyl Ethy	0.05
methyl Hydrazine	1.7000E-04 lb/ton	0.02			60344 methyl Hyd	0.02
Methyl Methacrylate	2.0000E-05 lb/ton	0.00			80626 Methyl Met	0.00
Dichloromethane	2.9000E-04 lb/ton	0.03			75092 Dichlorome	0.03
Phenol	1.6000E-05 lb/ton	0.00			108952 Phenol	0.00
Propionaldehyde	3.8000E-04 lb/ton	0.05			123386 Propionalde	0.05
Styrene	2.5000E-05 lb/ton	0.00			100425 Styrene	0.00
Tetrachloroethaylene	4.3000E-05 lb/ton	0.01			127184 Tetrachloro	0.01
Toluene	2.4000E-04 lb/ton	0.03			108883 Toluene	0.03
1,1,1 Trichloroethane	2.0000E-05 lb/ton	0.00			71556 1,1,1 Trichl	0.00
Vinyl Acetate	7.6000E-06 lb/ton	0.00			108054 Vinyl Aceta	0.00
Xylene	3.7000E-05 lb/ton	0.00			1330207 Xylene	0.00

Oil
Actual Throughput 0.00 1000 gal

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	1.5500E+00	lb/1000 gal	0.00	0.00
PM10	2.3000E+00	lb/1000 gal	0.00	0.00
PM	3.3000E+00	lb/1000 gal	0.00	0.00
SOx	CEM	CEM		
NOx	CEM	CEM		
VOC	2.0000E-01	lb/1000 gal		0.00
CO	5.0000E+00	lb/1000 gal		0.00
Lead compounds	1.2400E-03	lb/1000 gal		0.00
Ammonia	8.0000E-01	lb/1000 gal		0.00

CEMS Values Tons SOx 1993.80 Tons NOx 1364.5 lbs/mmBtu CO 0.418692

Emission Point	Coal				Natural Gas				002	Total
	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr		
Actual Throughput	366,950.00 Tons 8377 Ave Btu/lb				62.98 MMcf					
PM2.5	1.5200E-02	lb/mmBtu	0.00	46.72	7.60E+00	lb/MMcf	0.00	0.24	PM2.5	46.96
PM10	5.2300E-02	lb/mmBtu	0.00	160.77	7.60E+00	lb/MMcf	0.00	0.24	PM10	161.01
PM	5.2300E-02	lb/mmBtu	0.00	160.77	7.60E+00	lb/MMcf	0.00	0.24	PM	161.01
SOx		CEM Value		1,993.80	CEM	CEM			SOx	1,993.80
NOx		CEM Value		1,364.50	CEM	CEM			NOx	1,364.50
VOC	6.0000E-02	lb/ton		11.01	5.50E+00	lb/MMcf		0.17	VOC	11.18
CO	4.1869E-01	lb/mmBtu	CEM	1,287.03	2.40E+01	lb/MMcf		0.76	CO	1,287.79
Lead	NA								Lead	0.00
Ammonia	5.6500E-04	lb/ton		0.10	3.20E+00	lb/MMcf		0.10	7664417 Ammonia	0.20
Antimony	1.8000E-05	lb/ton		0.00					7440360 Antimony	0.00
Arsenic compounds	4.1000E-04	lb/ton		0.08					7440382 Arsenic cor	0.08
Beryllium compounds	2.1000E-05	lb/ton		0.00					7440417 Beryllium c	0.00
Cadmium compounds	5.1000E-05	lb/ton		0.01					7440439 Cadmium c	0.01
Chromium compounds	3.3900E-04	lb/ton		0.06					7440473 Chromium	0.06
Cobalt	1.0000E-04	lb/ton		0.02					7440484 Cobalt	0.02
Cyanide	2.5000E-03	lb/ton		0.46					Cyanide	0.46
Hydrochloric acid	1.2997E-01	lb/ton		23.85					7647010 Hydrochlori	23.85
Hydrogen fluoride	6.9112E-02	lb/ton		12.68					7664393 Hydrogen fi	12.68
Lead compounds	4.2000E-04	lb/ton		0.08					Lead comp	0.08
Manganese compounds	4.9000E-04	lb/ton		0.09					7439965 Manganese	0.09
Mercury compounds	1.0663E-04	lb/ton		0.02					7439976 Mercury co	0.02
Nickel compounds	2.8000E-04	lb/ton		0.05					7440020 Nickel com	0.05
POM	2.4000E-06	lb/mmBtu		0.01					POM	0.01
Radionuclides	9.5000E-02	lb/ton PM		0.01					Radionuclid	0.01
Selenium compounds	1.3000E-03	lb/ton		0.24					7782492 Selenium c	0.24
Acetaldehyde	5.7000E-04	lb/ton		0.10					75070 Acetaldehy	0.10
Acetophenone	1.5000E-05	lb/ton		0.00					98862 Acetophenu	0.00
Acrolein	2.9000E-04	lb/ton		0.05					107028 Acrolein	0.05
Benzene	1.3000E-03	lb/ton		0.24					71432 Benzene	0.24
Benzyl Chloride	7.0000E-04	lb/ton		0.13					100447 Benzyl Chlc	0.13
Di(2-ethylhexyl)phthalate	7.3000E-05	lb/ton		0.01					117817 Di(2-ethylh	0.01
Bromoform	3.9000E-05	lb/ton		0.01					75252 Bromoform	0.01
Carbon Disulfide	1.3000E-04	lb/ton		0.02					75150 Carbon Dis	0.02
2-Chloroacetophenone	7.0000E-06	lb/ton		0.00					532574 2-Chloroac	0.00
Chlorobenzene	2.2000E-05	lb/ton		0.00					108907 Chlorobenz	0.00
Chloroform	5.9000E-05	lb/ton		0.01					67663 Chloroform	0.01
Cumene	5.3000E-06	lb/ton		0.00					98828 Cumene	0.00
Dimethyl Sulfate	4.8000E-05	lb/ton		0.01					77781 Dimethyl Si	0.01

Ethylbenzene	9.4000E-05 lb/ton	0.02			100414 Ethylbenze	0.02
Chloroethane	4.2000E-05 lb/ton	0.01			75003 Chloroetha	0.01
1,2-Dichloroethane	4.0000E-05 lb/ton	0.01			107062 1,2-Dichloro	0.01
Formaldehyde	2.4000E-04 lb/ton	0.04	7.5000E-02 lb/MMcf	0.00	50000 Formaldehy	0.04
Hexane	6.7000E-05 lb/ton	0.01	1.8000E+00 lb/MMcf	0.06	110543 Hexane	0.07
Isophorone	5.8000E-04 lb/ton	0.11			78591 Isophorone	0.11
Methyl Tert Butyl Ether	3.5000E-05 lb/ton	0.01			1634044 Methyl Tert	0.01
Bromomethane	1.6000E-04 lb/ton	0.03			74839 Bromometr	0.03
Methyl Chloride	5.3000E-04 lb/ton	0.10			74873 Methyl Chlc	0.10
Methyl Ethyl Ketone	3.9000E-04 lb/ton	0.07			78933 Methyl Ethy	0.07
methyl Hydrazine	1.7000E-04 lb/ton	0.03			60344 methyl Hyd	0.03
Methyl Methacrylate	2.0000E-05 lb/ton	0.00			80626 Methyl Met	0.00
Dichloromethane	2.9000E-04 lb/ton	0.05			75092 Dichlorome	0.05
Phenol	1.6000E-05 lb/ton	0.00			108952 Phenol	0.00
Propionaldehyde	3.8000E-04 lb/ton	0.07			123386 Propionalde	0.07
Styrene	2.5000E-05 lb/ton	0.00			100425 Styrene	0.00
Tetrachloroethylene	4.3000E-05 lb/ton	0.01			127184 Tetrachloro	0.01
Toluene	2.4000E-04 lb/ton	0.04			108883 Toluene	0.04
1,1,1 Trichloroethane	2.0000E-05 lb/ton	0.00			71556 1,1,1 Trichl	0.00
Vinyl Acetate	7.6000E-06 lb/ton	0.00			108054 Vinyl Aceta	0.00
Xylene	3.7000E-05 lb/ton	0.01			1330207 Xylene	0.01

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
Actual Throughput	Oil	0.00 1000 gal		
PM2.5	1.5500E+00	lb/1000 gal	0.00	0.00
PM10	2.3000E+00	lb/1000 gal	0.00	0.00
PM	3.3000E+00	lb/1000 gal	0.00	0.00
SOx	CEM	CEM		
NOx	CEM	CEM		
VOC	2.0000E-01	lb/1000 gal		0.00
CO	5.0000E+00	lb/1000 gal		0.00
Lead compounds	1.2400E-03	lb/1000 gal		0.00
Ammonia	8.0000E-01	lb/1000 gal		0.00

Ethylbenzene	9.4000E-05 lb/ton	0.12
Chloroethane	4.2000E-05 lb/ton	0.05
1,2-Dichloroethane	4.0000E-05 lb/ton	0.05
Formaldehyde	2.4000E-04 lb/ton	0.31
Hexane	6.7000E-05 lb/ton	0.09
Isophorone	5.8000E-04 lb/ton	0.75
Methyl Tert Butyl Ether	3.5000E-05 lb/ton	0.05
Bromomethane	1.6000E-04 lb/ton	0.21
Methyl Chloride	5.3000E-04 lb/ton	0.69
Methyl Ethyl Ketone	3.9000E-04 lb/ton	0.51
methyl Hydrazine	1.7000E-04 lb/ton	0.22
Methyl Methacrylate	2.0000E-05 lb/ton	0.03
Naphthalene	1.3000E-05 lb/ton	0.02
Dichloromethane	2.9000E-04 lb/ton	0.38
Phenol	1.6000E-05 lb/ton	0.02
Propionaldehyde	3.8000E-04 lb/ton	0.49
Styrene	2.5000E-05 lb/ton	0.03
Tetrachloroethaylene	4.3000E-05 lb/ton	0.06
Toluene	2.4000E-04 lb/ton	0.31
1,1,1 Trichloroethane	2.0000E-05 lb/ton	0.03
Vinyl Acetate	7.6000E-06 lb/ton	0.01
Xylene	3.7000E-05 lb/ton	0.05

100414 Ethylbenze	0.12
75003 Chloroetha	0.05
107062 1,2-Dichloro	0.05
50000 Formaldehy	0.31
110543 Hexane	0.09
78591 Isophorone	0.75
1634044 Methyl Tert	0.05
74839 Bromomett	0.21
74873 Methyl Chlc	0.69
78933 Methyl Ethy	0.51
60344 methyl Hyd	0.22
80626 Methyl Met	0.03
91203 Naphthaler	0.02
75092 Dichlorome	0.38
108952 Phenol	0.02
123386 Propionald	0.49
100425 Styrene	0.03
127184 Tetrachloro	0.06
108883 Toluene	0.31
71556 1,1,1 Trichl	0.03
108054 Vinyl Aceta	0.01
1330207 Xylene	0.05

Actual Throughput Used Oil 0.10 1000 gal % ash 3.0

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.8800E+01	lb/1000 gal	95.0	0.00
PM10	5.1000E+01	lb/1000 gal	95.0	0.00
PM	6.1000E+01	lb/1000 gal	95.0	0.00
SOx	CEM			
NOx	CEM			
VOC	1.0000E+00	lb/1000 gal		0.00
CO	5.0000E+00	lb/1000 gal		0.00
Lead compounds	1.6800E+00	lb/1000 gal		0.00

Emission Point 004
 Oil
 Actual Throughput 0.00 1000 gal % sulfur 0.5

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	1.55E+00	lb/1000 gal		0.00
PM10	2.30E+00	lb/1000 gal		0.00
PM	3.30E+00	lb/1000 gal		0.00
SOx	1.42E+02	lb/1000 gal		0.00
NOx	2.40E+01	lb/1000 gal		0.00
VOC	2.00E-01	lb/1000 gal		0.00
CO	5.00E+00	lb/1000 gal		0.00

004 Pollutant	Total Tons/Yr
PM2.5	0.00
PM10	0.00
PM	0.00
SOx	0.00
NOx	0.00
VOC	0.00
CO	0.00

Emission Point 005
 bulldozing AP42 - 11.9.1
 Actual Throughput 4,879.00 hours

wind erosion EPA-450/3-88-008 for PM; PM10 & PM2.5 Partitioning from AP42 13.2.5
 18.1 Acres

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	6.3000E-01	lb/hr		1.54
PM10	5.5400E+00	lb/hr		13.51
PM	2.8580E+01	lb/hr		69.72

Emission Factor	Units	Control Eff	Tons/Yr
3.8458E+02	lb/acre	75	0.87
9.6144E+02	lb/acre	75	2.18
1.9229E+03	lb/acre	75	4.35

005 Pollutant	Tons/Yr
PM2.5	2.41
PM10	15.69
PM	74.07

Emission Point 006
 Dumper building dust collector 1 Emissions Test
 Actual Throughput 3,246,772.00 tons

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	4.0357E-04	lb/ton	0.00	0.66
PM10	4.0357E-04	lb/ton	0.00	0.66
PM	4.0357E-04	lb/ton	0.00	0.66

006 Pollutant	Tons/Yr
PM2.5	0.66
PM10	0.66
PM	0.66

Emission Point	009		Emissions Test	
	Transfer house 1 coal conveying			
Actual Throughput	3,246,772.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.0313E-04	lb/ton	0.00	0.33
PM10	2.0313E-04	lb/ton	0.00	0.33
PM	2.0313E-04	lb/ton	0.00	0.33

009	
Pollutant	Tons/Yr
PM2.5	0.33
PM10	0.33
PM	0.33

Emission Point	010		Emissions Test					
	EU010 Transfer house 2							
Actual Throughput	3,852,832.00 tons		EU 117	Emergency Reclaim hopper to belt 8				
			Actual Throughput	624,000.00 ton				
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	8.5135E-04	lb/ton	0.00	1.64	8.5135E-04	lb/ton	0.00	0.27
PM10	8.5135E-04	lb/ton	0.00	1.64	8.5135E-04	lb/ton	0.00	0.27
PM	8.5135E-04	lb/ton	0.00	1.64	8.5135E-04	lb/ton	0.00	0.27

010	
Pollutant	Tons/Yr
PM2.5	1.91
PM10	1.91
PM	1.91

Emission Point	117b		Emissions Test	
	Emergency Reclaim dumping (fugitive dust) AP-42 - 13.2.4			
Actual Throughput	624,000.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.8000E-04	lb/ton	0.00	0.09
PM10	8.9000E-04	lb/ton	0.00	0.28
PM	1.8900E-03	lb/ton	0.00	0.59

117b	
Pollutant	Tons/Yr
PM2.5	0.09
PM10	0.28
PM	0.59

Emission Point	011	Emissions Test		
	Transfer house 3 - conveyor 4ab			
Actual Throughput	3,852,832.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	4.1216E-04	lb/ton	0.00	0.79
PM10	4.1216E-04	lb/ton	0.00	0.79
PM	4.1216E-04	lb/ton	0.00	0.79

011	
Pollutant	Tons/Yr
PM2.5	0.79
PM10	0.79
PM	0.79

Emission Point	013	Emissions Test		
	Transfer house 4 - conveyor 5ab			
Actual Throughput	2,594,683.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	1.5778E-03	lb/ton	0.00	2.05
PM10	1.5778E-03	lb/ton	0.00	2.05
PM	1.5778E-03	lb/ton	0.00	2.05

013	
Pollutant	Tons/Yr
PM2.5	2.05
PM10	2.05
PM	2.05

Emission Point	014	Emissions Test		
	#3 East coal silos			
Actual Throughput	1,112,007.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	6.9110E-03	lb/ton	0.00	3.84
PM10	6.9111E-03	lb/ton	0.00	3.84
PM	6.9111E-03	lb/ton	0.00	3.84

014	
Pollutant	Tons/Yr
PM2.5	3.84
PM10	3.84
PM	3.84

Emission Point	015	Emissions Test		
	#3 West coal silos			
Actual Throughput	1,482,676.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	5.7556E-03	lb/ton	0.00	4.27
PM10	5.7556E-03	lb/ton	0.00	4.27
PM	5.7556E-03	lb/ton	0.00	4.27

015	
Pollutant	Tons/Yr
PM2.5	4.27
PM10	4.27
PM	4.27

Emission Point	016	Emissions Test		
	1 & 2 Crusher house - conveyor 9			
Actual Throughput	606,060.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	1.1304E-03	lb/ton	0.00	0.34
PM10	1.1304E-03	lb/ton	0.00	0.34
PM	1.1304E-03	lb/ton	0.00	0.34

016	
Pollutant	Tons/Yr
PM2.5	0.34
PM10	0.34
PM	0.34

Emission Point	017	Emissions Test		
	1 & 2 Tripper			
Actual Throughput	606,060.00 tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	1.8261E-03	lb/ton	0.00	0.55
PM10	1.8261E-03	lb/ton	0.00	0.55
PM	1.8261E-03	lb/ton	0.00	0.55

017	
Pollutant	Tons/Yr
PM2.5	0.55
PM10	0.55
PM	0.55

Emission Point	018	AP-42 - 13.2.1		
	Ash Haul Road			
Actual Throughput	3447.00 miles			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	3.5700E-01	lb/mile	50.00	0.31
PM10	1.4270E+00	lb/mile	50.00	1.23
PM	7.3150E+00	lb/mile	50.00	6.30

018	
Pollutant	Tons/Yr
PM2.5	0.31
PM10	1.23
PM	6.30

Emission Point	019	EU19a	AP-42 - 13.2.4	
	Ash Pond Dumping			
Actual Throughput	45,355.40 Tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	3.4800E-05	lb/ton	0.00	0.00
PM10	1.1000E-04	lb/ton	0.00	0.00
PM	2.3400E-04	lb/ton	0.00	0.01

Ash pond wind erosion		EU19c	EF from Fire 30501049	
162.00 acres (Max)				
Emission Factor	Units	Control Eff	Tons/Yr	
1.5200E+02	lb/acre	50.00	6.16	
3.8000E+02	lb/acre	50.00	15.39	
7.6000E+02	lb/acre	50.00	30.78	

019	
Pollutant	Tons/Yr
PM2.5	6.16
PM10	15.41
PM	30.82

	Ash Grading	EU19b	EF from Fire 30501047	
Actual Throughput	500.00 miles			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	7.0100E-03	lb/mile	50.00	0.00
PM10	1.2240E-01	lb/mile	50.00	0.02
PM	2.2630E-01	lb/mile	50.00	0.03

Emission Point	020	EF from Fire 30500619		
	Flyash Truck loading #3			
Actual Throughput	104037.00 Tons			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.0000E-01	lb/ton	74.30	2.67
PM10	2.0000E-01	lb/ton	74.30	2.67
PM	2.4000E-01	lb/ton	74.30	3.21

020	
Pollutant	Tons/Yr
PM2.5	2.67
PM10	2.67
PM	3.21

Emission Point	021			
	Flyash Truck loading 1 & 2			
Actual Throughput	25506.00 Tons	EF from Fire 30500619		
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.0000E-01	lb/ton	74.30	0.66
PM10	2.0000E-01	lb/ton	74.30	0.66
PM	2.4000E-01	lb/ton	74.30	0.79

021	
Pollutant	Tons/Yr
PM2.5	0.66
PM10	0.66
PM	0.79

Emission Point	025			
	Glycol storage tank			
Actual Throughput	0.16	1000 gal		
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
VOC	9.1630E+03	lb/1000 gal		0.73
Ethylene glycol	9.1630E+03	lb/1000 gal		0.73

025	
Pollutant	Tons/Yr
VOC	0.73
107211 Ethylene gl	0.73

Emission Point	30			
	EU028 Stockout Conveyor 7			
Actual Throughput	17,940.00 tons	AP-42 - 13.2.4		
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr
PM2.5	2.8000E-04	lb/ton	75.00	0.00
PM10	8.9000E-04	lb/ton	75.00	0.00
PM	1.8900E-03	lb/ton	75.00	0.00

30	
Pollutant	Tons/Yr
PM2.5	0.00
PM10	0.00
PM	0.00

Emission Point		31				EU031b Stacker/Reclaimer - Stackout				AP-42 - 13.2.4		31	
Actual Throughput		EU031a Stacker/Reclaimer - conveyor 3				Actual Throughput 3,228,832.00 ton							
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr		Pollutant	Tons/Yr		
PM2.5	2.8000E-04	lb/ton	56.25	0.20	2.8000E-04	lb/ton	56.25	0.20		PM2.5	0.80		
PM10	8.9000E-04	lb/ton	56.25	0.63	8.9000E-04	lb/ton	56.25	0.63		PM10	2.52		
PM	1.8900E-03	lb/ton	56.25	1.33	1.8900E-03	lb/ton	56.25	1.33		PM	5.32		
Actual Throughput		EU031c Stacker/Reclaimer - Reclaim in				EU031d Stacker/Reclaimer - Reclaim wheel							
Actual Throughput		3,228,832.00 tons				Actual Throughput 3,228,832.00 ton							
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr		Pollutant	Tons/Yr		
PM2.5	2.8000E-04	lb/ton	56.25	0.20	2.8000E-04	lb/ton	56.25	0.20					
PM10	8.9000E-04	lb/ton	56.25	0.63	8.9000E-04	lb/ton	56.25	0.63					
PM	1.8900E-03	lb/ton	56.25	1.33	1.8900E-03	lb/ton	56.25	1.33					
Emission Point		114										114	
Actual Throughput		Units 3 Emergency Generator											
	0.28	1000 gal	% sulfur	0.5									
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr						Pollutant	Tons/Yr		
PM2.5	4.2500E+01	lb/1000 gal		0.01						PM2.5	0.01		
PM10	4.2500E+01	lb/1000 gal		0.01						PM10	0.01		
PM	4.2500E+01	lb/1000 gal		0.01						PM	0.01		
SOx	3.9700E+01	lb/1000 gal x S		0.00						SOx	0.00		
NOx	6.0400E+02	lb/1000 gal		0.08						NOx	0.08		
VOC	4.9300E+01	lb/1000 gal		0.01						VOC	0.01		
CO	1.3000E+02	lb/1000 gal		0.02						CO	0.02		

Emission Point 119A
 1 & 2 flyash silo bag filter
 Actual Throughput 25,506.00 ton

EF from 30501107 - Table 11.12-2 Controlled
 PM2.5 from AP-42 Appendix B.2

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr		
PM2.5	1.4850E-04	lb/ton	0.00	0.00	119A	
PM10	3.4000E-04	lb/ton	0.00	0.00	PM2.5	0.00
PM	9.9000E-04	lb/ton	0.00	0.01	PM10	0.00
					PM	0.01

Emission Point 119B
 1 & 2 flyash silo bin vent filter
 Actual Throughput 25,506.00 ton

EF from 30501107 - Table 11.12-2 Controlled
 PM2.5 from AP-42 Appendix B.2

Pollutant	Emission Factor	Units	Control Eff	Tons/Yr		
PM2.5	1.4850E-04	lb/ton	0.00	0.00	119B	
PM10	3.4000E-04	lb/ton	0.00	0.00	PM2.5	0.00
PM	9.9000E-04	lb/ton	0.00	0.01	PM10	0.00
					PM	0.01

Emission Point	141 Coal				Oil				141 Total	
Actual Throughput	0.00 Tons 0 Ave Btu/lb				1,132.03 1000 gal 0.001 % sulfur				Pollutant	Tons/Yr
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Emission Factor	Units	Control Eff	Tons/Yr	Pollutant	Tons/Yr
PM2.5	2.5000E-02	lb/mmBtu	0.00	0.00	1.5500E+00	lb/1000 gal	0.00	0.88	PM2.5	0.88
PM10	2.5000E-02	lb/mmBtu	0.00	0.00	2.3000E+00	lb/1000 gal	0.00	1.30	PM10	1.30
PM	2.7000E-02	lb/mmBtu	0.00	0.00	3.3000E+00	lb/1000 gal	0.00	1.87	PM	1.87
SOx		CEM Value		0.00	1.4200E+02	*/%S lb/1000gal		0.08	SOx	0.08
NOx		CEM Value		0.00	2.4000E+01	lb/1000 gal		13.58	NOx	13.58
VOC	6.0000E-02	lb/ton		0.00	2.0000E-01	lb/1000 gal		0.11	VOC	0.11
CO		CEM Value		0.00	5.0000E+00	lb/1000 gal		2.83	CO	2.83
Lead	NA								Lead	0.00
Ammonia	5.6500E-04	lb/ton		0.00	8.0000E-01	lb/1000 gal		0.45	7664417 Ammonia	0.45
Antimony	1.8000E-05	lb/ton		0.00					7440360 Antimony	0.00
Arsenic compounds	4.1000E-04	lb/ton		0.00					7440382 Arsenic com	0.00
Beryllium compounds	2.1000E-05	lb/ton		0.00					7440417 Beryllium c	0.00
Cadmium compounds	5.1000E-05	lb/ton		0.00					7440439 Cadmium c	0.00
Chromium compounds	3.3900E-04	lb/ton		0.00					7440473 Chromium	0.00
Cobalt	1.0000E-04	lb/ton		0.00					7440484 Cobalt	0.00
Cyanide	2.5000E-03	lb/ton		0.00					Cyanide	0.00
Hydrochloric acid	1.2997E-01	lb/ton		0.00					7647010 Hydrochlori	0.00
Hydrogen fluoride	6.9112E-02	lb/ton		0.00					7664393 Hydrogen f	0.00
Lead compounds	4.2000E-04	lb/ton		0.00	1.2400E-03	lb/1000 gal		0.00	Lead comp	0.00
Manganese compounds	4.9000E-04	lb/ton		0.00					7439965 Manganese	0.00
Mercury compounds	1.0663E-04	lb/ton		0.00					7439976 Mercury co	0.00
Nickel compounds	2.8000E-04	lb/ton		0.00					7440020 Nickel com	0.00
POM	2.0800E-06	lb/mmBtu		0.00					POM	0.00
Radionuclides	9.5000E-02	lb/ton PM		0.00					Radionuclid	0.00
Selenium compounds	1.3000E-03	lb/ton		0.00					7782492 Selenium c	0.00
Acetaldehyde	5.7000E-04	lb/ton		0.00					75070 Acetaldehy	0.00
Acetophenone	1.5000E-05	lb/ton		0.00					98862 Acetophen	0.00
Acrolein	2.9000E-04	lb/ton		0.00					107028 Acrolein	0.00
Benzene	1.3000E-03	lb/ton		0.00					71432 Benzene	0.00
Benzyl Chloride	7.0000E-04	lb/ton		0.00					100447 Benzyl Chl	0.00
Di(2-ethylhexyl)phthalate	7.3000E-05	lb/ton		0.00					117817 Di(2-ethylh	0.00
Bromoform	3.9000E-05	lb/ton		0.00					75252 Bromoform	0.00
Carbon Disulfide	1.3000E-04	lb/ton		0.00					75150 Carbon Dis	0.00
2-Chloroacetophenone	7.0000E-06	lb/ton		0.00					532574 2-Chloroac	0.00
Chlorobenzene	2.2000E-05	lb/ton		0.00					108907 Chlorobenz	0.00
Chloroform	5.9000E-05	lb/ton		0.00					67663 Chloroform	0.00
Cumene	5.3000E-06	lb/ton		0.00					98828 Cumene	0.00
Dimethyl Sulfate	4.8000E-05	lb/ton		0.00					77781 Dimethyl S	0.00
Ethylbenzene	9.4000E-05	lb/ton		0.00					100414 Ethylbenze	0.00
Chloroethane	4.2000E-05	lb/ton		0.00					75003 Chloroetha	0.00
1,2-Dichloroethane	4.0000E-05	lb/ton		0.00					107062 1,2-Dichlor	0.00
Formaldehyde	2.4000E-04	lb/ton		0.00					50000 Formaldehy	0.00
Hexane	6.7000E-05	lb/ton		0.00					110543 Hexane	0.00

Isophorone	5.8000E-04 lb/ton	0.00
Methyl Tert Butyl Ether	3.5000E-05 lb/ton	0.00
Bromomethane	1.6000E-04 lb/ton	0.00
Methyl Chloride	5.3000E-04 lb/ton	0.00
Methyl Ethyl Ketone	3.9000E-04 lb/ton	0.00
methyl Hydrazine	1.7000E-04 lb/ton	0.00
Methyl Methacrylate	2.0000E-05 lb/ton	0.00
Naphthalene	1.3000E-05 lb/ton	0.00
Dichloromethane	2.9000E-04 lb/ton	0.00
Phenol	1.6000E-05 lb/ton	0.00
Propionaldehyde	3.8000E-04 lb/ton	0.00
Styrene	2.5000E-05 lb/ton	0.00
Tetrachloroethaylene	4.3000E-05 lb/ton	0.00
Toluene	2.4000E-04 lb/ton	0.00
1,1,1 Trichloroethane	2.0000E-05 lb/ton	0.00
Vinyl Acetate	7.6000E-06 lb/ton	0.00
Xylene	3.7000E-05 lb/ton	0.00

78591 Isophorone	0.00
1634044 Methyl Tert	0.00
74839 Bromometr	0.00
74873 Methyl Chk	0.00
78933 Methyl Ethy	0.00
60344 methyl Hyd	0.00
80626 Methyl Met	0.00
91203 Naphthaler	0.00
75092 Dichlorome	0.00
108952 Phenol	0.00
123386 Propionald	0.00
100425 Styrene	0.00
127184 Tetrachloro	0.00
108883 Toluene	0.00
71556 1,1,1 Trichl	0.00
108054 Vinyl Aceta	0.00
1330207 Xylene	0.00

Emission Point		142			142 Total	
	Unit 4 Aux Boiler	Natural Gas				
Actual Throughput	75.19 MMcf					
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Pollutant	Tons/Yr
PM2.5	7.60E+00	lb/MMcf		0.29	PM2.5	0.29
PM10	7.60E+00	lb/MMcf		0.29	PM10	0.29
PM	7.60E+00	lb/MMcf		0.29	PM	0.29
SOx	6.00E-01	lb/MMcf		0.02	SOx	0.02
NOx	1.40E+02	lb/MMcf		5.26	NOx	5.26
VOC	5.50E+00	lb/MMcf		0.21	VOC	0.21
CO	8.40E+01	lb/MMcf		3.16	CO	3.16
Lead	5.00E-04	lb/MMcf		0.00		
Ammonia	3.20E+00	lb/MMcf		0.12	Ammonia	0.12

Emission Point		143			143 Total	
	Unit 4 Emergency Generator	Emission Test				
Actual Throughput	0.43 1000 gal	% sulfur		0		
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr	Pollutant	Tons/Yr
PM2.5	6.44E+00	lb/1000gal		0.00	PM2.5	0.00
PM10	6.44E+00	lb/1000gal		0.00	PM10	0.00
PM	6.44E+00	lb/1000gal		0.00	PM	0.00
SOx	1.40E-01	lb/1000gal		0.00	SOx	0.00
NOx	2.46E+02	lb/1000gal		0.05	NOx	0.05
VOC	8.33E+00	lb/1000gal		0.00	VOC	0.00
CO	1.94E+01	lb/1000gal		0.00	CO	0.00
Ammonia	1.40E+00	lb/1000gal		0.00	Ammonia	0.00

Emission Point		144		Permit 03-A-429-P			
Units 4 Fire Pump							
Actual Throughput	0.00	1000 gal	% sulfur	0		144 Total	
				Controlled			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr		Pollutant	Tons/Yr
PM2.5	4.25E+01	lb/1000gal		0.00		PM2.5	0.00
PM10	4.25E+01	lb/1000gal		0.00		PM10	0.00
PM	4.25E+01	lb/1000gal		0.00		PM	0.00
SOx	0.00E+00	lb/1000gal		0.00		SOx	0.00
NOx	6.04E+02	lb/1000gal		0.00		NOx	0.00
VOC	4.80E+01	lb/1000gal		0.00		VOC	0.00
CO	1.30E+02	lb/1000gal		0.00		CO	0.00
Ammonia	1.40E+00	lb/1000gal		0.00		Ammonia	0.00

Emission Point		145		Permit 03-A-427-P			
Units 4 Cooling Tower				Not all Cells Operated in 2006			
Actual Operation	168.00	Hours				145 Total	
Actual Operation	2	# of Cells Operating					
				Controlled			
Pollutant	Emission Factor	Units	Control Eff	Tons/Yr		Pollutant	Tons/Yr
PM2.5	1.28E+00	lb/hr		0.01		PM2.5	0.01
PM10	1.28E+00	lb/hr		0.01		PM10	0.01
PM	1.28E+00	lb/hr		0.01		PM	0.01