

	CEMS Values				
	SO₂ Tons	NO_x lb/mmBtu	NO_x Tons	Heat lbs/mmBtu	CO lbs/mmBtu
EP001	1,252.6	0.474	1,130.18	4,768,676	NA
EP002	1,634.9	0.362	1,091.29	6,029,245	0.325
EP003	12,652.8	0.427	10,307.89	48,280,512	0.100

Note: NO_x Tons = (NO_x lb/mmBtu x Heat lbs/mmBtu)/2000

OPERATING PERMIT FEES FOR MIDAMERICAN ENERGY'S JOINTLY OWNED GENERATING UNITS

COUNCIL BLUFFS	TONS OF POLLUTANT EMITTED DURING CALENDAR YEAR 2004					
	SO2	NOX	PM10	VOC	TOXICS	TOTAL
TOTAL TONS	15,540.31	12,529.53	755.00	102.44	6.65	28,933.93
FEE TONS	4,000.00	4,000.00	755.00	102.44	6.65	8,864.09
CBEC 1 & 2 TOTAL TONS	2,887.50	2,221.56	179.55	17.48	1.14	
CBEC 1 & 2 FEE TONS	743.23	709.22	179.55	17.48	1.14	1,650.62
FEE TOTAL	\$0.00					
CBEC 1 & 2	\$0.00	#DIV/0!				
CBEC 3	\$0.00	#DIV/0!				

OWNER	FEES PRORATED BY OWNERSHIP		TONS		%
	OWNERSHIP	FEE SHARE			
MEC	79.100	\$0.00	CBEC1 COAL	234,632	7.00532882
ATLANTIC	2.500	\$0.00	CBEC2 COAL	337,033	10.0626811
CEDAR FALLS	3.100	\$0.00	CBEC3 COAL	2,777,671	82.9319901
CORN BELT	3.800	\$0.00	TOTAL	3,349,336	100
CIPCO	11.500	\$0.00	COMMON PM10		150.56
TOTAL	100.000	\$0.00	CB1&2 SHARE		25.70

BASED ON A \$/TON RATE OF: \$0.00 AND A POLLUTANT TONNAGE CAP 4,000

CBEC 1&2 emissions are the actual emissions for SOX, NOX and PM10.
All other pollutants are prorated by tons of coal burned.

CB 1 & 2 Emissions

	SO2	NOX	PM10
CB1	1,252.60	1,130.18	93.88
CB2	1,634.90	1,091.29	84.89
CB1&2 EMER GEN	0.00	0.05	0.00
CB1&2 AUX BOIL	0.00	0.04	0.00
CB1&2 CRUSHER			0.30
CB1&2 TRIPPER			0.48
CB1&2 AHS SYTEM			0.00
TOTAL	2887.5	2221.56	179.55

COMMON COAL HANDLING & ASH PM10
TONS

118.52
4.12
0.29
0.22
0.31
2.00
0.68
5.31
<u>19.11</u>
150.56

CB3 EMER GEN	0.01	0.02	0.00
CB3 AUX BOIL	0.00	0.00	0.00
CB3	12,652.80	10,307.89	409.23
CB3 COAL SILO			8.68
Total CB3	12,652.81	10,307.91	417.91

CBEC

Boiler PM & PM10

	From Test			Ave lb/mmBtu	PM EF	PM10 EF
	lb/mmBtu	lb/mmBtu	lb/mmBtu			
EP1	0.085	0.059	0.066	0.070 PM	0.0700	0.0469
EP2	0.046	0.042	0.044	0.044 PM	0.0440	0.0295
EP3	0.027	0.027	0.023	0.026 PM	0.0257	0.0172

Formula: PM Emission Factor = PM Test Results
 PM10 Emission Factor = PM Test Results x PM10 Particle Distribution

PM Test Results from most recent particulate test results as reported to the IDNR.
 PM10 Particle Distribution from AP-42.

Coal Handling Dust Collectors

Emission Point	Emission Unit	PM Test lb/hr	Coal Tons/Hr	Emission Factor lb/Ton	Old Factor	New Factor	Average
EP6	EU6	1.13	2800.00	4.0357E-04	4.5571E-03	4.0357E-04	2.48E-03
EP7	EU7	1.2	3500.00	3.4286E-04			
EP8	EU8	0.94	3500.00	2.6857E-04			
EP9	EU9	0.65	3500.00	1.8571E-04			
EP10	EU10, EU1	1.26	1500.00	8.4000E-04			
EP11	EU11	0.61	1500.00	4.0667E-04			
EP13	EU13	1.42	950.00	1.4947E-03			
EP14	EU14	3.11	450.00	6.9111E-03			
EP15	EU15	2.59	450.00	5.7556E-03			
EP16	EU16	0.52	500.00	1.0400E-03			
EP17	EU17	0.84	500.00	1.6800E-03			

Assume 6 months at each rate and equal coal throughput.

Formula: EF lb/Ton = PM Test lb/hr / Coal Tons/hr

Where: PM Test lb/hr = emissions test results as reported to the IDNR
 Coal Tons/hr = coal system throughput recorded during the test
 EF lb/Ton = Emission factor from calculation