

MidAmerican Energy Company  
2003 Coal Supplies  
HAP Emission Factor

Mine (Producer)	Seam	Total Tons	Avg % Moisture	Avg (ug/g) Chlorine (Cl)	Chlorine EF lbs/Ton	Avg (ug/g) Fluorine (F)	Fluorine EF lbs/Ton	Avg (ug/g) Mercury (Hg)	EF lbs/Ton
Eagle Butte (RAG)	Roland/Smith	0	30.4	50	7.15627E-02	53	7.76640E-02	0.09	1.25280E-04
Belle Ayr (RAG)	Wyodak	2,045,187	29.9	50	7.20768E-02	50	7.37943E-02	0.08	1.12160E-04
Cordero Rojo Complex (Kennecott)	Wyodak-Anderson	3,167,927	29.2	100	1.45593E-01	63	9.39093E-02	0.09	1.27440E-04
Jacobs Ranch (Kennecott)	Wyodak-Anderson	1,524,662	28.0	170	2.51703E-01	28	4.24449E-02	0.08	1.15200E-04
Rochelle/North Antelope Complex (Peabody)	Wyodak-Anderson	0	27.7	50	7.43389E-02	73	1.11121E-01	0.06	8.67600E-05
Rochelle/North Antelope - East Pit (Peabody)	Wyodak-Anderson	1,015,421	28.5	50	7.35163E-02	63	9.48377E-02	0.07	1.00100E-04
Caballo (Peabody)	Smith	1,970,243	29.9	50	7.20768E-02	60	8.85531E-02	0.09	1.26180E-04
Rawhide (Peabody)	Roland/Smith	0	31.0	50	7.09458E-02	62	9.00690E-02	0.07	9.66000E-05
Buckskin (Triton)	Anderson/Canyon	0	29.8	226	3.26252E-01	24	3.54718E-02	0.09	1.26360E-04
North Rochelle (Triton)	Lower Canyon	0	26.6	100	1.50940E-01	67	1.03539E-01	0.07	1.02760E-04
Wyodak (Wyodak)	Upper & Lower Wyodak	0	30.0	100	1.43948E-01	75	1.10534E-01	0.10	1.40000E-04
Antelope (Kennecott)	North Field - Canyon	31,059	26.5	129	1.94978E-01	51	7.89209E-02	0.07	1.02900E-04
Black Thunder (Arch)	Wyodak	2,983,205	27.3	140	2.09300E-01	42	6.42863E-02	0.08	1.16320E-04
Coal Creek (Arch)	Wyodak	0	30.6	153	2.18353E-01	120	1.75338E-01		
* Spring Creek - Northern PRB (Kennecott)		27,141	24.8	200	3.09283E-01	42	6.64970E-02		
** Medicine Bow - Hanna Basin (Arch)		66,995	13.5						
<b>Total TonsCoal</b>		<b>12,737,704</b>							
<b>Average Weighted by Coal Receipts</b>					<b>1.44414E-01</b>		<b>7.67907E-02</b>		<b>1.18483E-04</b>
<b>Calculated Air Emission Factor @ 90% Emitted</b>					<b>1.29973E-01</b>		<b>6.91116E-02</b>		<b>1.06635E-04</b>

Notes:

- 1) The table includes HCl, HF and trace metal analyses from all the potential Powder River Basin coals that may supply MEC. Values in ug/g dry basis.
- 2) The Nov03 test burn of Spring Creek coal at LGS was unsuccessful, and only about 2,000 tons of Spring Creek was burned.
- 3) Medicine Bow mine is scheduled to permanently close during Q1-04, so NN will only be receiving this Hanna Basin coal for a short while longer.
- 4) "Average Weighted by Coal Receipts" does not include Spring Creek and Medicine Bow coals.
- 5) Correction for molecular weights -  
Chlorine ---- (H 1.00 + Cl 35.45)/ Cl 34.45 = 1.0282  
Fluorine ---- (H 1.00 + F 18.99)/ F 18.99 = 1.0527