

**Council Bluffs Energy Center
Toxic Release Inventory
For the Year**

2006

CB1 Boiler Coal Burned	239,111.00 tons	5.26 % Ash	8347 Btu/lb
CB2 Boiler Coal Burned	366,950.00 tons	5.26 % Ash	8377 Btu/lb
CB3 Boiler Coal Burned	2,594,683.00 tons	5.01 % Ash	8456 Btu/lb
CB1 & CB2 Total Ash	31,878.81 tons		
CB3 Total Ash	129,993.62 tons		
CB1 & CB2 Fly Ash Generated - m	25,506.00 tons		
CB3 Fly Ash Generated - measure	104,037.00 tons		
CB1 & CB2 Bottom Ash Generated	5,952.58 tons		
CB3 Bottom Ash Generated = (coe	25,254.52 tons		
Fly Ash Sold	65,092.00 tons		
Bottom Ash Sold	225.80 tons		
Fly Ash Point Sources	4.02 tons		
Fly Ash Fugitive Sources	30.82 tons		
Ash pond outflow	0.00 Million gallons		

Metals										
Chemical	Arsenic	Barium	Chromium	Copper	Lead	Manganese	Mercury	Nickel	Vanadium	Zinc
Air Release	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs
CB1 Boiler	98	333	81	10	100	117	25	67	6	10
CB2 Boiler	150	512	124	15	154	180	39	103	9	15
CB3 Boiler	1,064	3,617	880	106	1,080	1,271	277	727	66	106
Fly Ash Point Source Dust Released	0	21	0	1	0	1	0	0	1	1
Fly Ash Fugitive Dust Released	2	158	2	5	3	11	0	2	5	5
CB4 Welding Rod Releases			29			186		3		
Total Air Releases	1,314	4,641	1,116	136	1,338	1,767	341	902	88	137
Chemical Emission Factor lbs/ton c		0.0013940		0.0000408					0.0000255	0.0000410
Chemical Concentration lbs/ton coal - wet	0.00161331	0.485507	0.0070334	0.0176798	0.0037209	0.0258442	0.00011848	0.00469114	0.0220046	0.0142734
Waste Release										
Chemical ppm (flyash)	26	2570	27	74	52	185	0.04	34	89	78
Chemical ppm (bottom ash)	22	2640	26	50	12	193	0.025	32	74	33
	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs
CB1 & CB2 Fly Ash	625	235,425	3,335	9,661	1,976	12,254	7	2,215	11,470	8,280
CB1 & CB2 Bottom Ash	104	57,977	722	1,029	25	3,112	1	458	1,851	346
CB3 Fly Ash	2,658	999,834	14,177	41,197	8,462	52,028	28	9,418	48,828	35,386
CB3 Bottom Ash	462	256,107	3,191	4,566	109	13,745	3	2,025	8,194	1,538
Fly Ash Sold	-1,650	-620,686	-8,799	-25,555	-5,245	-32,300	-17	-5,846	-30,298	-21,941
Bottom Ash Sold	-4	-2,273	-28	-40	-1	-122	0	-18	-73	-14
Check Sums										
Total metal in coal -air emission	3,850	1,549,343	21,425	56,453	10,571	81,139	38	14,117	70,343	45,549
Fly Ash metal + Bottom Ash metal	3,850	1,549,343	21,425	56,453	10,571	81,139	38	14,117	70,343	45,549
Impounded (Fly Ash)	1,633	614,573	8,713	25,303	5,193	31,982	17	5,788	30,000	21,725
Impounded (Bottom Ash)	562	311,811	3,885	5,554	133	16,736	3	2,465	9,972	1,870
Total Waste Releases	2,196	926,385	12,597	30,858	5,326	48,718	20	8,253	39,972	23,594
Water Releases										
Chemical ppm (ash water)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Water Releases	0	0	0	0	0	0	0	0	0	0
Total Water Releases	0	0	0	0	0	0	0	0	0	0
Total Releases All Media	3,510	931,025	13,713	30,993	6,664	50,485	362	9,155	40,060	23,731
Total Manufactured (metal)	5,164	1,553,984	22,541	56,589	11,910	82,907	379	15,018	70,431	45,685
Total Manufactured (lowest weight oxide)	6,816	1,735,800	29,484	70,849	12,827	107,033	379	19,103	103,604	68,046

Acid Gases			
Chemical	Hydrochloric Acid	Hydrogen Fluoride	Sulfuric Acid
Air Release	Lbs	Lbs	Lbs
CB1 Boiler	31,078	16,525	2,366
CB2 Boiler	47,694	25,361	3,394
CB3 Boiler	337,239	179,323	24,072
Total Air Releases	416,010	221,209	29,832
Waste Releases			
No significant releases			
Total Waste Releases	0	0	0
Water Releases			
No significant releases			
Total Water Releases	0	0	0
Total Releases All Media	416,010	221,209	29,832
Total Manufactured	416,010	221,209	29,832

Dioxin and Dioxin-Like Compounds**Air Release**

Boiler combustion Emission Factor from EPRI 4.66E-05 Lbs/trillion Btu
Grams/Lbs 453.59

Grams

CB1 Boiler 0.08
CB2 Boiler 0.13
CB3 Boiler 0.93

Total Air Releases 1.14

Waste Releases

No significant releases

Total Waste Releases 0

Water Releases

No significant releases

Total Water Releases 0

Total Releases All Media 1.1

Total Manufactured 1.1