

Chemistry of Pennsylvania Beneficially Used Coal Ashes

Data from Pennsylvania Department of Environmental Protection

Symbol	Element	Leaching Concentrations 75th %tile (mg/L)			PA DEP Leaching Limit (mg/L)	RCRA Hazardous Waste Values (mg/L)
		Pulverized Coal	Anthracite Fluidized Bed	Bituminous Fluidized Bed		
Ag	Silver	not	enough	data	2.5	5.0
Al	Aluminum	4.4	4.5	1.7	5	
As	Arsenic	0.10	0.05	0.05	0.25	5.0
B	Boron	5.0	0.23	0.10	15	
Ba	Barium	0.25	0.26	0.27	50	100
Cd	Cadmium	0.005	0.02	0.02	0.125	1.0
Cl	Chloride	9.2	4.2	10.0	2500	
Cr	Chromium	0.08	0.10	0.08	2.5	5.0
Cu	Copper	0.01	0.05	0.04	25	
Fe	Iron	0.07	0.17	0.10	7.5	
Hg	Mercury	0.0001	0.0004	0.002	0.05	0.2
Mo	Molybdenum	0.42	0.1	0.13	4.375	
Mn	Manganese	0.01	0.27	0.02	2.5	
Na	Sodium	21.0	8.0	12.1	2500	
Ni	Nickel	0.02	0.05	0.05	2.5	
Pb	Lead	0.05	0.10	0.10	0.375	5.0
Sb	Antimony	0.02	0.05	0.05	0.15	
Se	Selenium	0.08	0.05	0.06	1	1.0
SO4	Sulfate	474	498	1590	2500	
Zn	Zinc	0.04	0.10	0.05	50	

