Coal Ash Ponds in Missouri

Utility	Plant	No. of Ponds/No. unlined ponds[1]	High Levels of Arsenic, Boron, Sulfate, Cobalt, Lithium or Molybdenum[2]	Highest Levels of Arsenic (As), Boron (B), and Sulfate (S), Cobalt (Co), Lithium (Li), and Molybdenum (Mb)	Closure Plans[3]	Notes
Ameren Missouri	Meramec	5/5	Boron, Sulfate, Arsenic, Cobalt, Lithium, Molybdenum	As: 2x standard, B: 15x standard, S: 5x standard, Co: 1.1x standard, Li: 3.5x standard, Mb: 5.2x standard	Closure In place	to close by end 2022
	Rush Island	1/1	Boron, Sulfate, Arsenic, Lithium, Molybdenum	As: 25x standard, B: 7.8x standard, S: 1.36x standard , Li: 1.1x standard, Mb: 9.4x standard	Closure In place	
	Labadie	2/2 (+ 1 LF)	Boron, Sulfate, Arsenic, Cobalt, Lithium, Molybdenum	As: 3.5x standard, B: 9.1x standard, S: 3.1x standard , Co: 1.6x standard, Li: 1.2x standard, Mb: 6.7x standard	Closure In place	
	Sioux	3/3 (+ 1 LF)	Boron, Sulfate, Cobalt, Lithium, Molybdenum	B: 15.6x standard, S: 4.4x standard, Co: 2x standard, Li: 1.6x standard, Mb: 83x standard	Closure In place	
Kansas City Power & Light	Iatan	2/2 (+ 1 LF)	No data for ponds; Arsenic, Lithium (landfill)	No data for ponds; Landfill - As: 5.2x standard; Li: 1.3x standard	Clean Closure	
	Montrose	2/2 (+ 1 LF)	Sulfate, Arsenic, Lithium	As: 1.5x standard, S: 4x standard, Li: 1.9x standard	Clean Closure	to close or convert to gas by Dec 31, 2018
	Sibley	2/2 (+ 1 LF)	Boron, Arsenic, Molybdenum	B: 2.5x standard, As: 25x standard, Mb: 13.3x standard	Clean Closure	to close or convert to gas by Dec 31, 2018
	Lake Road	1/1	No data	No data	No information	converted to gas in 2016
Associated Electric Cooperative	New Madrid	3/3 (+ 1 LF)	Boron, Sulfate, Arsenic, Cobalt, Lithium, Molybdenum	B: 10x standard, S: 1.8x standard, As: 1.1x standard, Li: 1.2x standard, Mb: 39x standard	2 Closure In Place; 1 Undecided	
	Thomas Hill	4/4	Sulfate, Arsenic, Cobalt	As: 2.5x standard, S: 9x standard, Co: 1.2x standard	1 Clean; 3 Undecided	
City of Sikeston	Sikeston	2/2	Boron, Sulfate	B: 2.9x standard, S: 1.8x standard	Closure In place	EJ concerns
City Utilities of Springfield	James River	2/2 (+ 1 LF)	No data	No data	Clean Closure	converted to gas October 2015
	John Twitty	2/2 (+ 1 LF)	No data for ponds; LF in assessment monitoring	No data for ponds; LF in assessment monitoring	Clean Closure	
Empire District	Asbury	1/1	Sulfate, Cobalt, Lithium	S: 9.6x standard, Co: 7.7x standard, Li: 8.5x standard	Closure in place	
Independence Power & Light	Blue Valley	3/3	No data	No data	Closure In place	converted to gas September 2015
	Missouri City	1/1	No data	No data	Closure In place	closed September 2015
City of Columbia	Columbia	1/1	No data	No data	Clean Closure	converted to gas in 2015

[1] EPA coal ash regulations treat a pond as considered unlined if it has no liner or its liner does not meet the regulations' liner requirements. 40 CFR 257.71(a)(3).

[2] High levels defined as exceeding federal and state standards - the federal drinking water standard for arsenic (10 µg/l), 40 C.F.R. § 141.62(b), the Missouri water quality standard for drinking water for sulfate (250 µg/l), 10 CSR 20-7.031 Table A1, the Missouri water quality standard for groundwater for boron (2,000 µg/l), 10 CSR 20-7.031 Table A1, and the groundwater protection standards set by EPA in the Coal Combustion Residuals regulations for cobalt (6 µg/l), lithium (40 µg/l) and molybdenum (100 µg/l), 40 C.F.R. § 257.95(h)(2).

[3] Federal regulations allow two means of closing ash ponds: (1) Clean Closure, which requires removing all of the ash and cleaning up related contamination, 40 C.F.R. § 257.64(c); or (2) Closure in Place, which requires draining and stabilizing the pond, preventing post-closure infiltration of water into the pond and leakage of ash out of the pond, and placing a final cover system over the pond, 40 C.F.R. § 257.102(d).