September 14, 2020 Don Brown

Illinois Pollution Control Board

## Comments on the upcoming IPCB hearings regarding developing coal ash rules

I came to Illinois in May 1985 to head up the newly created Hazardous Waste Research and Information Center, now the Illinois Sustainable Technology Center which is part of the UI Prairie Research Institute. Many of the issues we were dealing with at the Center were the cleanup and containment of legacy contaminants. Threats from hazardous waste to the environment and to human health had become a major national issue, and the Center was created in Illinois to combine research, information collection and dissemination and technical assistance to help address these very complex issues. Coal ash is one of those legacy contaminants, and while not a focus of cleanup efforts in those early years of the Center it has become more of a focus recently.

Coal ash contaminants in water include arsenic, cobalt, sulfates and lithium. Coal ash dust may contain radioactive particles, mercury, arsenic, hexavalent chromium (a carcinogen), lead, manganese, silica and hydrogen sulfide. Many of the existing coal ash pits are unlined, and thus contaminants have leached and continue to leach into surrounding groundwater or directly to surface waters. Some of these contaminants in groundwater have moved into surface waters such as occurs at the Vermilion River station near Danville. In addition, the location of the Vermilion River ash pits in the floodplain of the river are at risk of being breached by floods, particularly as the frequency and intensity of flood events increases with our changing climate. This is a site where the only truly long-term solution is to remove the contaminants to a more secure location where water can be kept out of the ash. In fact, one of the recommendations of Prairie Rivers and other environmental groups is that the rules should not allow ash to remain in place if this ash is wet or could become wet in the future. I concur with this recommendation.

Cleanup of contaminated groundwater can be a complex and expensive proposition. Once groundwater is contaminated it poses a threat to potential or actual drinking water supplies and to human health. Thus, every effort needs to be made to keep contaminants found in coal ash from entering ground and surface water. As long as the ash is exposed to water there remains the threat of continued contamination of nearby water sources.

While my understanding is that the draft rule only covers coal ash impoundments, ash used around power plants and industrial facilities or old coal ash dumps could pose a potential health and environmental threat. I would like to see the rule include an evaluation of these situations and where a potential risk is identified that it be remediated in a consistent fashion with rules regarding ash pits.

I thank you for taking up this important issue for Illinois

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