Charles J. Bitting HC 73, Box 182-A Marble Falls, AR 72601

June 29, 2014

Doug Szenher Arkansas Department of Environmental Quality Public Outreach and Assistance Division 5301 Northshore Drive North Little Rock, AR 72118

Dear Mr. Szenher:

I support, as proposed, the third party rulemaking petitions before the Arkansas Pollution Control and Ecology Commission to prohibit large and medium swine Confined Animal Feeding Operations under Regulation 6 (Docket # 14-003R), and similarly sized Confined Animal Operations under Regulation 5 (Docket # 14-002R). I agree with the results of the analysis of the Financial Impact for each amendment as well as the Economic Impact and Environmental Benefit Analysis for each. I feel the amendments will have positive environmental and economic impacts for the Buffalo River watershed, and for the State of Arkansas when they are adopted. Failure to adopt these amendments will likely result in adverse environmental impacts to the Buffalo River as well as adverse impacts to the economy in the river's watershed. These adverse impacts will likely spread to other areas of the State of Arkansas if the Buffalo River is not afforded this level of protection from swine CAFO operations.

I feel fortunate to call Newton County home. I have loved the area since I first visited here in 1980. I grew up on a small family farm in southern Missouri, we raised beef cattle, hogs, chickens, and other livestock. We raised or grew most of what we ate. A creek flows through the family farm. I spent much of my youth fishing, swimming, and enjoying this creek. Of course, none of this has any bearing on the issue at hand. I simply wanted to point out that I am not, nor have I ever been, an urbanite.

I spent a good deal of my youth crawling through the caves in southwest Missouri. It was easy to see how the cave streams, if polluted, could rapidly transport waste to the creeks and rivers. Upon graduating high school, I attended Southwest Missouri State University (Missouri State University) where I received a bachelor degree in Geology. During this period of study I focussed heavily on cave geology and hydrology. I also learned land surveying skills which would prove important in later years.

Since I moved to the Buffalo River country in 1987 I have visited hundreds of caves within the watershed observing the wildlife, geologic features, and hydrology of these caves and cave systems. I have participated in many dye traces within the watershed to better understand where water goes when it enters the ground. Often, I was surprised where the dye came out. Groundwater flow does not necessarily follow surface

topography. I also assisted ADEQ staff with surveying weirs for the swine CAFO study in the early 1990s. I saw dead zones downhill of some of the waste lagoons, It was explained to me that the nutrient levels were too high downhill of these lagoons because of overtopping of the lagoons. The lagoons were installed on shaley sections of the Hale and Bloyd Formations pretty well preventing leakage. These lagoons were not on karst, had they been, they would have caused more serious problems. Because limestones and dolomite are exposed at the surface on more than half of the watershed, there are serious concerns about groundwater contamination from CAFOs that use lagoons for liquid animal waste management. This is exacerbated by the degree to which these formations have been fractured by tectonic forces and the high local relief of the area. This results in very rapid downward transport of water to the water table or to a geologic unit that causes the water to flow laterally toward surface streams. Karst does not filter out contaminants, the conduits are much too large. This situation is present all over the karst portions of the watershed, whether sinkholes appear on the surface or not. The Buffalo River is the base level for the watershed. It is where all the water goes. If the water has pollutants it carries them to the Buffalo River and the flow paths are hidden, so the contaminants get there before we even know they are coming.

To protect the Buffalo River, the economic engine of the region, we must protect the watershed. The experience of the citizens of North Carolina and Iowa as well as other states has shown that these large and medium CAFOs are significant environmental hazards. The CAFO operation areas in Iowa and North Carolina do not have karst as well developed karst as in the Buffalo River watershed. These CAFOs have caused severe pollution to the creeks and rivers in Iowa and North Carolina anyway. Our karst will move the contaminants faster and more efficiently, and the outfall locations will be less predictable.

As a landowner within the Buffalo River watershed, I need to be assured that ADEQ is doing everything in its power to prevent pollution of the Buffalo River and its tributaries. I have invested a great deal of money in property, I would hate to have that investment ruined by the stench of CAFOs and the water polluted by their waste. Please consider my point of view when deciding whether or not to grant the rulemaking. Thank you!

Sincerely,

Charles J. Bitting