## November 5, 2018 Revised Regulation 37 Comments

These are my Regulation 37 comments. I still believe the cart is coming before the horse and this Regulation should not be passed until the background information is available and Arkansas goes to agronomic rates instead of the current phosphorus based applications for nutrient management plans. The photos show the results of the current C & H Hog Farm nutrient management plans on the waters of the Buffalo River. This is a disaster to the fish, wildlife and tourism of the area and a perfect example of how quickly another watershed can be destroyed by the transport of so called 'nutrients' to another watershed. I am against this regulation at this time, please consider the consequence.

Sincerely, Carol Bitting

May 1, 2018 Arkansas Department of Environmental Quality reg-comment@adeq.state.ar.us.



I appreciate the opportunity to make comments on the Proposed Nutrient Trading Water Quality Program Draft Regulation 37.

The last few years living in Newton County, Arkansas where there are sink holes, thin soils and rapid transport of water through miles of underground conduits emerging in springs, streams and rivers has educated me to the importance of establishing numerical values to water quality for our state's water. Not only do we have diverse topographical terrains but we have waters that appear to be going somewhere but little information to the source, destination or quality the water is available.



The different medians the waters flow through allow for absorption of sediment, pollution, and just about anything movable as it travels downstream to the Gulf of Mexico and the unknown which could be my drinking water source.

Little study has been done in watersheds to identify the actual source or quality of the waters within or how a watershed is defined. If this isn't available now, how are you going to identify the source, quality, de-gradation and effects? Who will be the enforcing agency and what will you be able to enforce?

When C&H Hog Farms began spreading nutrients (see Nutrient Management Plan) on the fields aligning Big Creek many people in the area stopped using their springs for their drinking water, others no longer fish or swim in Big Creek due to the slimy rocks and dull appearance of the water. Prior to the approval of the discharge permit there was no water quality standards set for Big Creek and this allowed for no enforcement or even available data to compare the degrading of the stream to. It is obvious to the eye and nose that Big Creek waters are not the same quality since the millions of gallons of hog waste have been spread in the thin, highly erodible soils aligning the stream, nor were the sink holes and rapid transport of the surface runoff considered for water sources or traced to the many spring fed streams in the area such as Sheldon Branch, Rock Creek, Elm Springs, John Eddings, Cave Creek, Dry Creek, Mitch Hill Spring, Lick Creek, Richland Creek, Lime Kiln Hollow or the Buffalo River prior to the addition of the CAFO to the neighborhood. This is an example to help you understand that prior to implementing a nutrient trading program you need background information otherwise you have no idea of the expense, enforcement or actions needed to protect the waters of the state and provide all citizens with no degradation to the water.

Without studies to define the source of waters and the different values naturally found in water it would be impossible to know if the addition of something to that stream would reduce the water quality or dispose of the natural fauna and biological entities already surviving in that water body. Where is this criteria for this establishment located and who will be responsible for the expense and implementation of this information? Will a department or employees be added to ADEQ to do this or will another agency be responsible for obtaining this information? Will industry be absorbing this expense because it seems if they are the ones who need to come into compliance they should be totally responsible for the expense involved in gaining this information? If this is so, is there a standard for a peer reviewed scientific study and who will develop these standards?

Arkansas has a very diverse set of topographical settings and due to this and the many different types of soils Nutrient Trading should not be proposed at this time until the high



quality waters are guaranteed non degradable protection.

Attached are some photos of nutrient trading in the Buffalo National River. The source of the nutrients haven't been identified but the nutrients have definitely been traded to a once high quality stream by a polluting source. Can you tell me the water quality of the Buffalo River? At what point is the nutrient controlled? Can you tell me based on photos of the Buffalo River in years past if you have ever recorded this degradation to the stream? Can you tell me the source of this nutrient? Can you identify the nutrient that is causing the algal bloom? Can you tell me what the criteria for correcting this nutrient surplus is? Can you tell me who is responsible? How much is this going to cost the state of Arkansas? How long will it take to fix this problem? Can you tell me the social, health and economic expense to all citizens who rely on tourism for livelihood in these counties. Suppose the Buffalo River is a highly studied stream, do you have an idea of the cost of the study's and how much is it going to cost the state to study all the streams where high quality water has been identified to assure citizens

that other streams are not going to become as these photos show the Buffalo River has become the last 2 summers.

Nutrient trading isn't for every state and where Arkansas has boasted its high quality waters we need to be extremely careful when taking on new regulations that do not benefit the citizens.

Please think wisely, not all industry should expand, not all industry is important to the people of the state. We need to consider the future and plan accordingly. Water is precious and we need to practice the highest standards of protecting it.

Carol Bitting HC 73 Box 182 Ar Marble Falls, Ar 72648