Arkansas Pollution Control and Ecology Commission
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

Dear APCEC/ADEQ:

November 5, 2018

Thank you for providing me and the public the opportunity to comment about the revised proposed Regulation No. 37 entitled "Arkansas Nutrient Water Quality Trading Regulations".

According to EPA, Arkansas delivers 7-10% of the nutrient load that contributes to the Gulf of Mexico Dead Zone. Non-point source runoff is the leading cause of stream degradation in the US. Any new legislation must move toward and verify overall reduction of nutrient loading of our waterways. Although initiated by the four cities in NWA, this regulation would **apply throughout the state** and **should contain detailed requirements, numeric nutrient standards, monitoring and enforcement, and additional provisions to ensure that nutrient loads are reduced from current levels to lower levels.**

The proposed regulation does not provide adequate safeguards or controls to prevent abuse and increased nutrients loads to Arkansas rivers and lakes for the following reasons.

1. Unlike Oklahoma and many other states, Arkansas does not have any statewide numeric nutrient standards. Instead Arkansas has unenforceable narrative standards that allow unconstrained non-point source nutrient loading in most areas of the state. Despite the requirement for nutrient management plans in nutrient surplus areas, there remains no independent monitoring of application rates, timing of nutrient application, or required data collection during storm runoff events that impact nutrient loading in streams and reservoirs. As witnessed by the huge algae blooms in the Buffalo National River during the past three years, excess application of phosphorous and nitrogen leads to water degradation and impacts local tourism-based economies. The establishment by regulation of numeric nutrient standards should be implemented before nutrient trading is considered. **Without state wide numeric nutrient standards are in place, creating nutrient trading regulations is putting the cart before the horse.**
2. The proposed regulation fails to require the development of a baseline nutrient load for the stream or river segment. Under Section 3 A (5) the proposed regulation states "Evidence that the credit generating project will result in a reduction of nutrient discharges below existing baseline requirements. The "baseline requirements" are regulatory and not empirically based. This constitutes a legal sleight of hand on what a "baseline" means. The regulation does not require empirical site-stream specific data gathering and does not mention the fact that there are little, if any, non-point source regulatory limits, monitoring or other requirements. Under the proposed regulation, ADEQ will not be able to sufficiently determine if nutrient load reduction has occurred. Sound and robust stream sampling in a variety of conditions (storm,

base flow, low flow), during different seasons and temperature will be required to identify a baseline.

3. The proposed regulation ignores EPA's recommendations and allows trades to occur in Arkansas's most sensitive watersheds and tributaries designated as Extraordinary Resource Waters (ERW), Ecologically Sensitive Waterbodies (ESW) or Natural or Scenic Waterways (NSW). The precautionary principle should be applied to prohibit any nutrient trades from occurring in any watershed that contains any segment of an ERW, ESW, or NSW. These streams were designated to have the highest level of protection and this regulation allows trades to occur without oversight or significant safeguards. Many ERW, ESW, and NSW are prime tourism destinations. Tourism is Arkansas's second largest industry increasing annually at a rate of approximately 4%.
4. The proposed regulation fails to implement additional requirements or safeguard in area such as NW Arkansas where highly fractured karst is found. As dye tracing studies have demonstrated, nutrients from non-point sources can be transported with little attenuation and relatively fast velocities into streams and creeks quickly degrading water quality. Traditional Best Management Practices (BMPs) while effective in reducing stream bank erosion in other areas of the country are not as effective in reducing nutrient loading from storm runoff in karst areas.
5. There is no guideline on who monitors or has access to the point source and non-point source locations to collect information or inspect for compliance. Third party inspectors should be allowed on both the point source and non-point sources premises without notice to ensure compliance with terms of agreements. The results of these inspections and other monitoring should be publicly available and posted within 30 days of inspection or data collection on the ADEQ website.
6. There are no criteria or standards for the applicant to demonstrate as required under Section 4 A 2 that trades will "not result in unacceptable localized adverse effects on water quality". Adverse effects are in the eye of the beholder. Because there are no numeric nutrient (only unenforceable narrative) standards in Arkansas, regulations are lacking to address excessive algae and nutrient pollution. Likewise, the same lack of criteria or standards exists for A 3 and A 4.
7. The regulation does not prohibit nutrient trading between watersheds as recommended by EPA.
8. The proposal is silent on who will inspect or enforce this regulation and what penalties may be assessed if applicants are out of compliance.
9. The proposed trade credit ratio of 1.5:1 is inadequate and does not take into consideration the uncertainty of trades and the karst geology of the northern part of the state.
10. The proposed regulation appears to not have been well researched or based on previous guidelines from the EPA or other programs. The drafters have said "We want trades to occur and in other states they have not occurred because there has been too much regulation". Oversight and regulations are usually good because the intent is to protect water quality. The regulation needs to be redrafted with appropriate safeguards to ensure our waters are protected.

In sum, proposed nutrient trading regulation should not be implemented without enforceable numeric nutrient standards, well defined criteria for trades, well established scientifically defensible stream

nutrient baselines, and well-funded and clearly defined monitoring and enforcement measures and does not address recommendations made by the EPA.

If approved, Regulation 37 as drafted creates a huge Christmas gift loop hole to polluting industries. It legalizes an open season for manipulation, corruption, and increased nutrient loading in Arkansas streams, lakes and reservoirs. Let's do no further harm to our water quality in Arkansas. Please reject this regulation without significant revisions.

Sincerely,

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