

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

Dear APCEC/ADEQ:

May 2, 2018

Thank you for providing me and the public the opportunity to comment about the 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, adequate provisions to ensure without a reasonable scientific doubt 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 increase 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 data collection during storm runoff events that impact nutrient loading in streams and reservoirs. The Arkansas Phosphorous Index (API) is not very sensitive to high levels of phosphorous application and provides a method for overapplication of nutrients in excess of agronomic rates in areas where a nutrient management plan is required. Excess application of phosphorous and nitrogen leads to harmful algal blooms. The Buffalo National River has experienced two large unprecedented algal blooms in the past two years. **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 2 (I) the current regulation states "No Nutrient Credit Generating Project shall be approved by the Director unless the project, activity, or discharge reduction involved in this project will reduce the nutrient load below the applicable baseline requirements", and then notes the requirements to be the current regulatory requirements. 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), seasons, temperature will be required to identify a baseline.

3. The proposed regulation 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). It is irresponsible to allow any nutrient trades to occur 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. Sections A 8 and A 9 do not contain any standards or requirements for guidance or methodology to support their assertion that the nutrient trades will do no harm and will reduce nutrient load. This section should identify the qualifications of the applicant or consultant, the methods and calculations used to assert that no increase in nutrients will occur, and a scientifically sound plan to monitor and report to the public nutrient levels at sampling locations where trades are implemented.
6. There are 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.
7. There are no criteria or standards for the applicant to demonstrate as required under A 5 that there will be "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 6 and A 7.
8. The regulation does not prohibit nutrient trading between watersheds.
9. The regulation lacks evaluation criteria for the Director of ADEQ to assess the proposal. It appears that nutrient trading will be totally at her discretion and subject to political pressure on either side, not based on defensible scientifically collected data.
10. Item 3 C prohibits ADEQ from enforcing compliance with this regulation and instead designates the Arkansas Natural Resource Commission (ANRC) as the enforcement agency. ADEQ is the agency responsible for approval of nutrient trades and should be the agency that enforces applicant compliance. The Arkansas Pollution Control and Ecology Commission for which this regulation is sought for approval does not have oversight of the ANRC.

11. There are no prescribed or required trade ratios to take into consideration the uncertainty of trades. Instead these are left at the discretion of the applicant and offer no guidance to the director of ADEQ when approving or denying a trade.
12. The proposed regulation appears to not have been well researched or based on previous guidelines from the EPA or other programs. The drafters of the proposed regulation should consider reviewing the Chesapeake Bay Program Nutrient Trading Fundamental Principles and Guidelines <http://www.deq.state.va.us/Portals/0/DEQ/Water/PollutionDischargeElimination/ChesapeakeBayProgramNutrientTrading2001.pdf> and the EPA toolkit <https://www.epa.gov/npdes/water-quality-trading-basics-and-policy>. These documents could serve to ensure that Arkansas has adequate environmental protections before implementing a regulation that is ripe for abuse.

Finally, I don't believe nutrient trading should 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 and adequately funded monitoring and enforcement.

The proposed Regulation 37 as drafted creates a huge Christmas gift loop hole to polluting industries. It legalizes an open season for manipulation, corruption, and increase nutrient loading in Arkansas streams, lakes and reservoirs. Doesn't Arkansas deserve to have her most beautiful streams and reservoirs protected from increasing nutrients? After all, we've told everyone we're the NATURAL STATE, but you wouldn't know it from this proposed regulation.

Sincerely,

A handwritten signature in black ink, appearing to read "Teresa A. Turk". The signature is fluid and cursive, with the first name "Teresa" and last name "Turk" clearly distinguishable.

Teresa A. Turk
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