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

RE: Proposed Regulation Change for Arkansas Regulation 2 (Tyson - Waldron Site Specific Criteria Revision for Minerals)

Dear Mr. Szenher,

Enclosed are the Environmental Protection Agency’s (EPA) comments for the site specific revisions to Regulation 2 (Arkansas Water Quality Standards) as proposed by the third party Tyson Foods – Waldron Facility. The EPA commends the Arkansas Department of Environmental Quality (ADEQ) for its thorough analysis and comments regarding the study.

After reviewing the proposed rulemaking documentation, EPA has concerns that the third party disregarded or did not address ADEQ’s input before proceeding with the rulemaking. Additionally, EPA notes in the enclosed comments other concerns that should be addressed prior to adoption of this rule.

Thank you for the opportunity to provide comment. We look forward to continuing to work with ADEQ in further developing the state’s water quality standards. If you have questions on these comments please contact me at (214) 665-6644 or Matt Hubner at (214) 665-9736.

Sincerely,

Philip A. Crocker  
Chief, Watershed Management Section  
Water Quality Protection Division

Enclosures

cc: Sarah Clem, Branch Manager, Water, ADEQ  
Mary Barnett, Ecologist Coordinator, ADEQ
EPA COMMENTS ON DRAFT REVISIONS TO ARKANSAS’S REGULATION No. 2

General Comments

EPA is including a copy of ADEQ’s comments as enclosure 2. We are doing so because many of the specific concerns outlined in their letter are valid and appear to have not been addressed in the final version. ADEQ’s comments question the validity of this study by noting these general issues:

- Inappropriate mass balance approach; specifically, the use of 4 cubic feet per second (cfs) versus critical low flow values.
- Inappropriate evaluation of instream minerals concentrations
- Evaluation of biological and habitat data does not include all available data and ADEQ review of all data does not appear to support the conclusions of the study
- No effort to quantify effects of non-point source inputs
- Inconsistencies with the appropriate standards for the receiving waterbodies (see EPA comment below).

Enclosure 2 contains specific questions from ADEQ regarding these issues, and EPA strongly suggests that the Arkansas Pollution Control and Ecology Commission (APC&EC) and third party evaluate these issues before approving this rule.

Aside from the issues identified above, EPA also has comments following its review of the rulemaking documentation. They are as follows:

- The publicly available Petition to initiate Rulemaking and Legislative Questionnaire on the APC&EC website incorrectly identifies that the rulemaking proposes to reduce TDS in the segment of the Poteau River downstream the confluence of the unnamed tributary from 660 mg/l to 514 mg/l. This should read that the rulemaking is proposing to increase TDS from the currently approved 500 mg/l to 514 mg/l.
- EPA has concerns with the validity of the mass balance calculations utilized to derive the site specific criteria. ADEQ used critical low flows in the original site specific criteria derivation, and this proposal places a 4 cfs cap on all segments that are being revised. This results in the Poteau River and the lower segment of the unnamed tributary having the same site specific criteria, where one would reasonably expect a lower concentration of minerals in the Poteau due to dilution of the larger waterbody.
- ADEQ’s comments touch upon the toxicity component of the study and correctly state that the toxicity results alone do not preclude evaluation of the biology and habitat components. EPA agrees and supports ADEQ’s critical assessment of the study’s habitat and biology conclusions and assertion that the data indicates a biological shift as a result of the discharges and not habitat.
- The GRI data is beneficial; however, EPA notes that the results of this data only represent a modeled acute lethal response. This model does not provide information on more sensitive
reproductive effects and biological shifts that the habitat and biology component would address.