SUBJECT: Arkansas Pollution Control and Ecology Commission, Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas—Tyson Foods, Inc., Waldron Plant

<u>DESCRIPTION</u>: Tyson Foods, Inc. – Waldron Plant ("Tyson-Waldron") operates a hatchery, feed mill, and chicken processing plant located in Waldron, Arkansas. The Tyson-Waldron facility discharges treated process wastewater through Outfall 001 into an Unnamed Tributary of the Poteau River pursuant to NPDES Permit No. AR0038482, which was issued by the Arkansas Department of Environmental Quality ("ADEQ") and became effective October 1, 2010. The discharge enters the Unnamed Tributary and then flows to the Poteau River, which runs to and across the Arkansas state line.

Tyson-Waldron's NPDES permit contains discharge limits for chlorides, sulfates, and total dissolved solids ("TDS"), which are based upon Arkansas water quality standards for the Poteau River and the Unnamed Tributary. Tyson-Waldron evaluated alternatives through a Section 2.306 Site Specific Study, which included field studies, toxicity testing, mass balance modeling, engineering analyses of alternatives for discharge and treatment, and an analysis of designated uses in the Poteau River and the Unnamed Tributary.

Based upon the Revised Site Specific Study, Tyson-Waldron requests the following site-specific modifications to Arkansas Pollution Control and Ecology Commission ("APC&EC") Regulation No. 2:

• Modify the dissolved minerals water quality criteria for the Unnamed Tributary from the Tyson-Waldron outfall to the confluence with the Poteau River

chlorides from 150 mg/L to 180 mg/L sulfates from 70 mg/L to 200 mg/L TDS from 660 mg/L to 870 mg/L

• Modify the dissolved minerals water quality criteria for the Poteau River from the confluence with the Unnamed Tributary to Scott County Road 59

chlorides from 120 mg/L to 185 mg/L sulfates from 60 mg/L to 200 mg/L TDS from 500 mg/L to 786 mg/L

Tyson-Waldron's proposed site-specific modifications are supported by:

- Tyson-Waldron is not seeking a change from historical water quality conditions in the Unnamed Tributary and the Poteau River;
- Designated uses for the Unnamed Tributary and the Poteau River are being maintained;

- All stations downstream of the Tyson-Waldron discharge indicate support of a diverse macroinvertebrate community;
- All stations downstream of the Tyson-Waldron discharge indicate support of the Aquatic Life (Fishery) use according to ADEQ Assessment Criteria;
- Concentrations of dissolved minerals (chlorides, sulfates, and TDS) downstream of the Tyson-Waldron discharge are not adversely affecting the macroinvertebrate community;
- Whole effluent toxicity testing results reveal an excellent toxicity record and documents that the levels of chloride, sulfate, and TDS discharged from the Tyson-Waldron do not interfere with organism health;
- Current wastewater treatment plant operations require 100% optimization at all times to stay below permit limits, which allows for zero margin of safety in performance;
- There is no other economically feasible treatment technology for the removal of the minerals. Reverse osmosis treatment technology is available; however, it is not cost effective, it generates a concentrated waste stream that is environmentally difficult to dispose of, it is not required to meet the designated uses, and it would produce no significant additional environmental protection;
- Proposed modifications would enable Tyson-Waldron to implement water conservation practices saving nearly 70.2MG water/year and facilitating a 10-20% reduction in nutrient loading to the Poteau River;
- 40 CFR 13 1.11(b)(1)(ii) provides states with the opportunity to adopt water quality standards that are "modified to reflect site-specific conditions"; and
- The basis for site-specific standards is set forth in 40 CFR 131.10(g).

PUBLIC COMMENT: A public hearing on the most recently proposed modifications was held on April 2, 2019, in Waldron, Arkansas. The public comment period expired on April 16, 2019. *Tyson-Waldron* provided the following public comment summary:

On May 9, 2013, Tyson-Waldron filed a Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2. On May 20, 2013, Tyson-Waldron filed an Amended Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2 (the "First Amended Petition"). The Arkansas Pollution Control & Ecology Commission granted Tyson-Waldron's First Amended Petition. A public hearing was held on July 22, 2013, in Waldron, Arkansas, and the public comment period ended on August 5, 2013. ADEQ and EPA commented and expressed concerns regarding the methods and procedures utilized in the 2012 Poteau River Section 2.306 Site Specific Water Quality Study, which supported the First Amended Petition.

Following the public comment period, Tyson-Waldron worked cooperatively with the Arkansas Department of Environmental Quality to address each of the identified concerns with the site specific study. Tyson-Waldron prepared an entirely new report that utilized a different background flow, replaced default background mineral conditions with measured in-stream conditions, and relied on a different percentile to calculate proposed site specific criteria. Tyson-Waldron also commissioned an additional year of water quality and biological data collection for the Poteau River. Ultimately, after nearly five years, Tyson-Waldron submitted to ADEQ a completely revised report entitled Poteau River Section 2.306 Site Specific Water Quality Study (Rev. 3 December 2018).

Based on the revised 2018 report, Tyson-Waldron filed with the Commission a Second Amended Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2. The Second Amended Petition diverged significantly from the 2013 proposal and included a completely revised proposal for water quality criteria for chlorides, sulfates, and TDS, and revised stream segments for the new criteria. Tyson-Waldron requested the Commission order a new public hearing and comment period for the public to review and comment on the entirely different regulatory amendments proposed in the Second Amended Petition. A public hearing was held on April 2, 2019, in Waldron, Arkansas, and the public comment period ended on April 16, 2019.

No comments were submitted during the comment period for the amendments proposed in the Second Amended Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2. Moreover, it is not clear that comments submitted during the 2013 public comment period remain relevant to the regulatory changes proposed in the Second Amended Petition, particularly because the commenters in the 2013 comment period did not submit comments concerning the 2018 proposal. Out of an abundance of caution, however, Tyson-Waldron noted two comments from the 2013 comment period that may be relevant to the new regulatory proposal in the Second Amended Petition:

Comment No. 1 (Mary Cameron): Commenter inquired whether federal regulations allow for water quality standards as stated in the proposed amendments.

Response: Yes. Federal Regulations authorize states to establish site-specific water quality criteria. 40 CFR Part 131; APCEC Regulation No. 2, Reg. 2.306.

Comment No. 2 (Arkansas Natural Heritage Commission): Commenter noted the possible occurrence of several state species of concern in the Poteau River and stated that it would be appropriate to consider the implications of the proposed amendments to the species.

Response: The Poteau River Section 2.306 Site Specific Water Quality Study (Rev. 3 December 2018) evaluated the impact of elevated dissolved minerals on the aquatic life in the Poteau River. The 2018 report documents (i) that the Poteau River, downstream of the Tyson-Waldron facility, supports the Aquatic Life (Fishery) use and (ii) that concentrations of dissolved minerals are not adversely affecting the relevant aquatic life community in the Poteau River.

For its public comment summary, the *Arkansas Department of Environmental Quality* submitted the following:

On May 9, 2013, the Arkansas Pollution Control and Ecology Commission granted the petition of Tyson Foods, Inc.-Waldron Plant ("Tyson Waldron") to initiate rulemaking to amend APC&EC Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas. ADEQ's August 5, 2013 comments served as ADEQ's response to public comments received during the first round of public comments. In response to those public comments, Tyson Waldron amended its site specific water quality study, collected additional data, and moved to reinitiate the rulemaking based on the results in the revised study.

On January 25, 2019, the Arkansas Pollution Control and Ecology Commission granted the second petition of Tyson Waldron to initiate rulemaking to amend APC&EC Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas. A public hearing was held on April 2, 2019, at the Scott County Courthouse in Waldron, Arkansas. No public comments were made at the public hearing. The public comment period ended on April 16, 2019. No written comments were received.

The proposed effective date is pending legislative review and approval.

FINANCIAL IMPACT: Tyson-Waldron states that the amended rule has no financial impact.

LEGAL AUTHORIZATION: This amendment to Regulation No. 2, Water Quality Standards, stems from a third-party rulemaking request made to the Arkansas Pollution Control and Ecology Commission ("Commission") by Tyson Foods, Inc. – Waldron Plant. Arkansas Code Annotated § 8-4-202(c)(1) bestows upon any person the right to petition the Commission for the issuance, amendment, or repeal of any rule. *See also* Ark. Code Ann. § 8-4-102(6) (defining "person" as "any state agency, municipality, governmental subdivision of the state or the United States, public or private corporation, individual, partnership, association, or other entity"). Pursuant to Ark. Code Ann. § 8-4-202(a), the Commission is given and charged with the power and duty to adopt, modify, or repeal, after notice and public hearings, rules implementing or effectuating the powers and duties of the Commission and the Arkansas Department of Environmental Quality. The Commission is further given and charged with the power and duty to promulgate rules, including water quality standards. *See* Ark. Code Ann. § 8-4-201(b)(1)(A). *See also* Ark. Code Ann. § 8-4-202(b)(3).

QUESTIONNAIRE FOR FILING PROPOSED RULES AND REGULATIONS WITH THE ARKANSAS LEGISLATIVE COUNCIL

DEPARTMENT/AGENCY _	Arkansas Department of Environmen	tal Quality			
D. TT W. C	Office of Water				
DIVISION DIRECTOR	Caleb Osborne				
CONTACT PERSON	Caleb Osborne				
ADDRESS	5301 Northshore Drive, Little Rock, A	R 72118			
PHONE NO. <u>501/682-0665</u>					
NAME OF PRESENTER AT	COMMITTEE MEETING Allan Ga				
PRESENTER E-MAIL aga	tes@mwlaw.com	A 8308			
	INSTRUCTIONS	no ni suo a treama na sialtet			
 A. Please make copies of this B. Please answer each question necessary. 	form for future use. on <u>completely</u> using layman terms. You	u may use additional sheets, if			
C. If you have a method of indexing your rules, please give the proposed citation after "Short Title of this Rule" below.					
D. Submit two (2) copies of this questionnaire and financial impact statement attached to the front of two (2) copies of the proposed rule and required documents. Mail or deliver to:					
Arkansas Legis Bureau of Legis One Capitol Ma Little Rock, AR	Rules Review Section lative Council slative Research all, 5 th Floor 72201				
**********	**********				
1. What is the short title of this	Arkansas Pollution Control and Ecology Commission, Regulation No. 2, Regulation Establishing Water Quality Standards for is rule? Surface Waters of the State of Arkansas				
2. What is the subject of the pro	segment of the Unname Waldron Facility to the o	sas Water Quality Standards for a ed Tributary from the Tyson — confluence with the Poteau River from the confluence with the ott County Road 59.			
Is this rule required to comply with a federal statute, rule, or regulation? If yes, please provide the federal rule, regulation, and/or statute		Yes No X			
citation.	citation.				
4. Was this rule filed under the emergency provisions of the Administrative Procedure Act?					
If yes, what is the effective d rule?		Yes No X			

	When does the emergency rule expire? <u>N/A</u>				
	Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act?				
	Yes No X				
5.	Is this a new rule? Yes \square No X If yes, please provide a brief summary explaining the regulation. N/A				
	Does this repeal an existing rule? Yes \(\subseteq \text{No X} \) If yes, a copy of the repealed rule is to be included with your completed questionnaire. If it is being replaced with a new rule, please provide a summary of the rule giving an explanation of what the rule does. N/A				
	Is this an amendment to an existing rule? Yes X No If yes, please attach a mark-up showing the changes in the existing rule and a summary of the substantive changes. Note: The summary should explain what the amendment does, and the mark-up copy should be clearly labeled "mark-up."				
	See Attachments A (blackline of the affected pages of APC&EC Regulation No. 2) and B (executive summary).				
5.	Cite the state law that grants the authority for this proposed rule? If codified, please give the Arkansas Code citation.				
	Act 472 of 1949, as amended Ark. Code Ann. § 8-4-101, et seq.				
7.	What is the purpose of this proposed rule? Why is it necessary?				
	The purpose of the proposed rule is to amend APC&EC Regulation No. 2, as follows:				
	• Modify the dissolved minerals water quality criteria for the Unnamed Tributary from the Tyson-Waldron outfall to the confluence with the Poteau River				
	chlorides from 150 mg/L to 180 mg/L sulfates from 70 mg/L to 200 mg/L TDS from 660 mg/L to 870 mg/L				
	 Modify the dissolved minerals water quality criteria for the Poteau River from the confluence with the Unnamed Tributary to Scott County Road 59 				
	chlorides from 120 mg/L to 185 mg/L sulfates from 60 mg/L to 200 mg/L TDS from 500 mg/L to 786 mg/L				

The rule is necessary to modify the dissolved minerals criteria for the above-listed stream segments to levels that reflect current and historic water quality conditions, and which are appropriate for Tyson Foods, Inc. – Waldron Plant's operations. The site-specific water quality criteria are protective of the designated uses, and they will not adversely affect the aquatic life. Tyson-Waldron's current wastewater operations require 100% optimization at all times and allow for no margin of safety. This is impractical and unsustainable, and there are no economically feasible

treatment technologies capable of reliably and sustainably reducing the dissolved mineral concentration to levels of the current standards in the affected segments. Moreover, the site-specific criteria will also enable Tyson Foods, Inc. — Waldron Facility to implement environmentally beneficial water conservation practices and reduce nutrient loading (total phosphorus) into the Poteau River.

8. Please provide the address where this rule is publicly accessible in electronic form via the Internet as required by Arkansas Code § 25-19-108(b).

https://www.adeq.state.ar.us/regs/draft regs.aspx

9. Will a public hearing be held on this proposed rule? Yes X No If yes, please complete the following:

Date: April 2, 2019

Time: 6:00 PM

Scott County, Arkansas at the Scott

Place: County Courthouse (Waldron)

10. When does the public comment period expire for permanent promulgation? (Must provide a date.)
April 16, 2019

11. What is the proposed effective date of this proposed rule? (Must provide a date.)

The regulation becomes effective 20 days after filing of the final regulation, as adopted by the Commission, with the Secretary of State.

12. Please provide a copy of the notice required under Ark. Code Ann. § 25-15-204(a), and proof of the publication of said notice.

See Attachment C.

13. Please provide proof of filing the rule with the Secretary of State and the Arkansas State Library as required pursuant to Ark. Code Ann. § 25-15-204(e).

Filing with the Secretary of State does not occur until after legislative review and APC&EC consideration and adoption of the rulemaking.

14. Please give the names of persons, groups, or organizations that you expect to comment on these rules? Please provide their position (for or against) if known.

For or Neutral:

Arkansas Department of Environmental Quality

Arkansas Natural Resources Commission

Arkansas Department of Health

Arkansas Natural Heritage Commission

Arkansas Game and Fish Commission

U.S. Environmental Protection Agency, Region VI

Against:

Unknown

BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

IN RE: REQUEST BY)	
TYSON FOODS INC –)	
WALDRON PLANT)	
TO INITIATE RULEMAKING TO AMEND		DOCKET NO. 13-005-R
REGULATION NO.2	í	

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY'S RESPONSIVE SUMMARY

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Respectfully submitted.

Basil V. Hicks III, Attorney

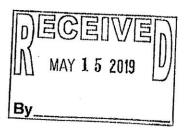
ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

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5301 Northshore Drive North Little Rock, AR 72118 (501) 682-0884

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TYSON FOODS, INC. - WALDRON PLANT ("TYSON-WALDRON")

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