

EXHIBIT B

LEGISLATIVE QUESTIONNAIRE

**QUESTIONNAIRE
FOR FILING PROPOSED RULES AND REGULATIONS
WITH THE ARKANSAS LEGISLATIVE COUNCIL
AND JOINT INTERIM COMMITTEE**

DEPARTMENT/AGENCY: Arkansas Department of Environmental Quality

DIVISION: Water Division

DIVISION DIRECTOR: Ellen Carpenter, Chief

CONTACT PERSON: Ellen Carpenter, Chief

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PHONE NO.: 501/682-0655 **FAX NO.:** 501/682-0910

E-MAIL: carpenter@adeq.state.ar.us

NAME OF PRESENTER AT COMMITTEE MEETING: Marcella Taylor

PRESENTER E-MAIL: mtaylor@mwlaw.com

TO: Donna K. Davis
Subcommittee on Administrative Rules and Regulations
Arkansas Legislative Council
Bureau of Legislative Research
Room 315, State Capitol
Little Rock, AR 72201

1. What is the short title of this rule?
Arkansas Pollution Control and Ecology Commission, Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas

2. What is the subject of the proposed rule?
Modification of the dissolved mineral standards of the Arkansas Water Quality Standards (WQS) for a segment of Crooked Creek from the outfall of Harrison's Wastewater Treatment Plant to the mouth of Crooked Creek.

3. Is this rule required to comply with federal statute or regulations?
Yes ___ No X

4. Was this rule filed under the emergency provisions of the Administrative Procedure Act?
Yes ___ No X

If yes, what is the effective date of the emergency rule? N/A

When does the emergency rule expire? N/A

Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act? Yes _____ No _____ N/A

Is this a new Rule? Yes _____ No X

If yes, please provide a brief summary explaining the regulation.

Does this repeal an existing rule: Yes _____ No X If yes, a copy of the repealed rule is to be included with your completed questionnaire.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.

5. 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 substance changes.

See Attachments A (blackline of the affected pages of APCEC Regulation No. 2) and B (executive summary).

6. 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. and Ark. Act 401 of 1997, ARK. CODE ANN. § 8-5-901 et seq.

7. What is the purpose of the rule? Why is it necessary?

The purpose of the proposed rule is to amend APCEC Regulation No. 2 to:

- *modify the water quality criterion for chloride, sulfate and total dissolved solids (TDS) for Crooked Creek from the outfall of Harrison's Wastewater Treatment Plant to ADEQ monitoring station WHI0193 as follows: chloride from 20 mg/L to 22.6 mg/L; sulfate from 20 mg/L to 24.4 mg/L; and, TDS from 200 mg/L to 269 mg/L; and*
- *modify the TDS water quality standards for Crooked Creek from ADEQ monitoring station WHI0193 to the mouth of Crooked Creek as follows: TDS from 200 mg/L to 238 mg/L.*

The rule is necessary to modify the dissolved mineral criteria to levels that reflect current and historic water quality conditions, appropriate for the City of Harrison's and the City of Yellville's wastewater treatment operations, and are protective of the designated uses. The site-specific water quality criteria modifications will not adversely affect the aquatic life or the designated uses of the receiving waters. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segments of Crooked Creek.

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

Date: Monday, October 19, 2015

Time: 6:00 p.m.

Place: North Arkansas College, Durand Conference Center B, 1515 Pioneer Drive,
Harrison, AR 72601

9. When does the public comment period expire for permanent promulgation? (Must provide a date.)

The period for receiving all written comments by the public shall conclude ten (10) business days after the date of the public hearing pursuant to Arkansas Pollution Control and Ecology Commission Regulation No. 8, Section 8.806(C), unless an extension of time is granted. Thus, the public comment period will expire November 2, 2015 unless an extension of time is granted.

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

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

11. Do you expect the rule to be controversial? Yes _____ No X If yes, please explain.

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

For or Neutral:

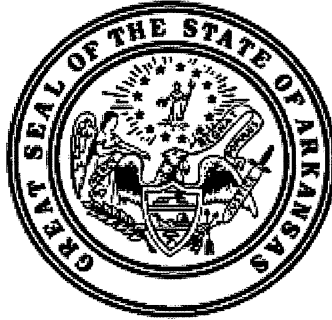
*Arkansas Department of Environmental Quality
Arkansas Department of Health
Arkansas Natural Resources Commission
Region VI, US Environmental Protection Agency
Arkansas Game and Fish Commission*

Against:

Unknown

**ATTACHMENT A TO
LEGISLATIVE QUESTIONNAIRE**

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



REGULATION NO. 2

REGULATION ESTABLISHING WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF ARKANSAS

INITIAL DRAFT

Submitted to the Arkansas Pollution Control and Ecology Commission on August 28, 2015

<u>Stream</u>	<u>Concentration-mg/L</u>		
	<u>Cl⁻</u>	<u>SO₄⁼</u>	<u>TDS</u>
Unnamed trib)			
Unnamed trib to Big Creek	71	60	453
Lost Creek Ditch	20	30	270
Little Red River (including Greers Ferry Reservoir)	20	30	100
Black River	20	30	270
Strawberry River	20	30	270
Spring River	20	30	290
Eleven Point River	20	30	270
Stennitt Creek	ER	ER	456*
South Fork Spring River	20	30	270
Myatt Creek	20	30	270
Current River	20	30	270
White River (Dam #3 to Missouri line, including Bull Shoals Reservoir)	20	20	180
Buffalo River	20	20	200
<u>Crooked Creek (Harrison WWTP outfall to Monitoring Station WHI0193)</u>	<u>22.6</u>	<u>24.4</u>	<u>269</u>
<u>Crooked Creek (Monitoring Station WHI0193 to the mouth)</u>	20	20	<u>238</u>
White River (Missouri line to headwaters, including Beaver Reservoir)	20	20	160
Kings River	20	20	150
West Fork White River	20	20	150
St. Francis River Basin			
St. Francis River (Mouth to 36° N. Lat.)	10	30	330
L'Anguille River	20	30	235
Tyronza River (headwaters to Ditch No. 6 confluence)	20	30	350
Ditch No. 27	ER	480	1200
Ditch No. 6 (mouth to Ditch No. 27 confluence)	ER	210	630
Tyronza River (mouth to Ditch No. 6 confluence)	20	60	350
Little River	20	30	365
Pemiscot Bayou	20	30	380
St. Francis River (36° N. Lat. to 36° 30' N. Lat.)	10	20	180
Ouachita River Basin			
Bayou Bartholomew	50	20	500
Chemin-A-Haut Creek	50	20	500
Overflow Creek	20	30	170
Bayou Macon	30	40	330
Boeuf River	90	30	460
Big Cornie Creek	230	30	500
Little Cornie Creek	200	10	400
Three Creeks	250	10	500
Little Cornie Bayou	200	20	500
Unnamed trib from GLCC 003	538*	35*	519*
Unnamed trib to Little Cornie Bayou	305*	ER	325*
Little Cornie Bayou from unnamed trib to State Line	215*	25*	500*
Walker Branch	180*	ER	970*

Seasonal Ozark Highlands aquatic life use - all streams with watersheds of less than 10 mi² except as otherwise provided in Reg. 2.505

Perennial Ozark Highlands aquatic life use - all streams with watersheds of 10 mi² and larger and those waters where discharges equal or exceed 1-cfs

*As designated in the National Wild and Scenic Rivers System

**Except for those waters with designated use variations supported by Use Attainability Analysis or other investigations.

Site Specific Designated Use Variations Supported by Use Attainability Analysis or Other Investigations

- Railroad Hollow Creek - no fishable/swimmable uses (OH-1, #1)
- Columbia Hollow Creek - seasonal aquatic life use March-June (OH-1, #2)
- Curia Creek - below first waterfall, perennial aquatic life use (OH-4, #3)
- Moccasin Creek – below Arkansas Highway 177, perennial aquatic life use (OH-3, #4)
- Stennitt Creek- from Brushy Creek to Spring River, no domestic water supply use (OH-4, #6)

SPECIFIC STANDARDS: OZARK HIGHLANDS ECOREGION
(Plates OH-1, OH-2, OH-3, OH-4)

	<u>Streams</u>	<u>Lakes and Reservoirs</u>
Temperature °C (°F)*	29 (84.2)	32 (89.6)
Trout waters	20 (68)	
Turbidity (NTU) (base/all)	10/17	25/45
Minerals	see Reg. 2.511	see Reg. 2.511
Dissolved Oxygen**	<u>Pri.</u> <u>Crit</u>	see Reg. 2.505
<10 mi ² watershed	6 2	
10 to 100 mi ²	6 5	
>100 mi ² watershed	6 6	
Trout waters	6 6	

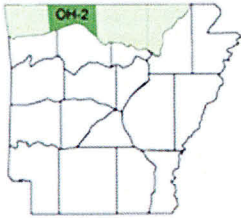
All other standards (same as statewide)

Site Specific Standards Variations Supported by Use Attainability Analysis

- Railroad Hollow Creek: from headwaters to Spavinaw Creek - year-round dissolved oxygen - 2 mg/L (OH-1, #1)
- Curia Creek - below first waterfall, critical season dissolved oxygen 6 mg/L (OH-4, #3)
- Moccasin Creek - below Highway 177, critical season D.O. 5mg/L (OH-3, #4)
- SWEPCO Reservoir - maximum temperature 54°C (limitation of 2.8°C above natural temperature does not apply) (OH-1, #5)
- Stennitt Creek - from Brushy Creek to Spring River, total dissolved solids = 456 mg/L (OH-4, #6)
- Crooked Creek – from Harrison WWTP outfall to ADEQ Monitoring Station WHI0193: chloride 22.6 mg/L, sulfate 24.4 mg/L; TDS 269 mg/L (OH-2, #7) †**
- Crooked Creek – from ADEQ Monitoring Station WHI0193 to mouth: TDS 238 mg/L (OH-3, #8) †**

† Not applicable for clean water act purposes until approved by EPA.

Plate OH-2 (Ozark Highlands)



LEGEND

- • Extraordinary Resource Waters
- • Natural and Scenic Waterways
- Variation by UAA 7
- Ecologically Sensitive Waterbodies
- ESW Caves, Springs, and Seeps
- Trout_Waters

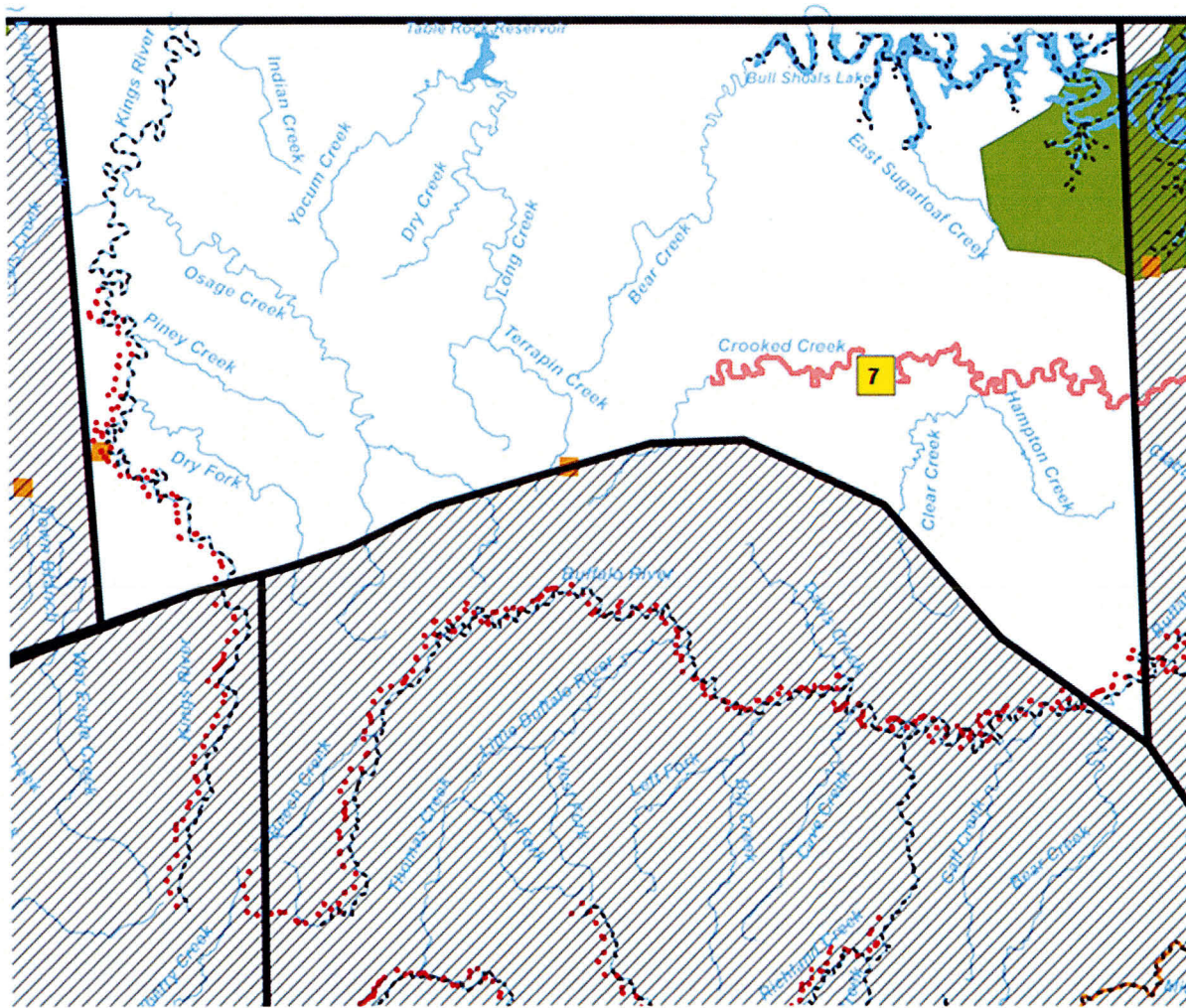
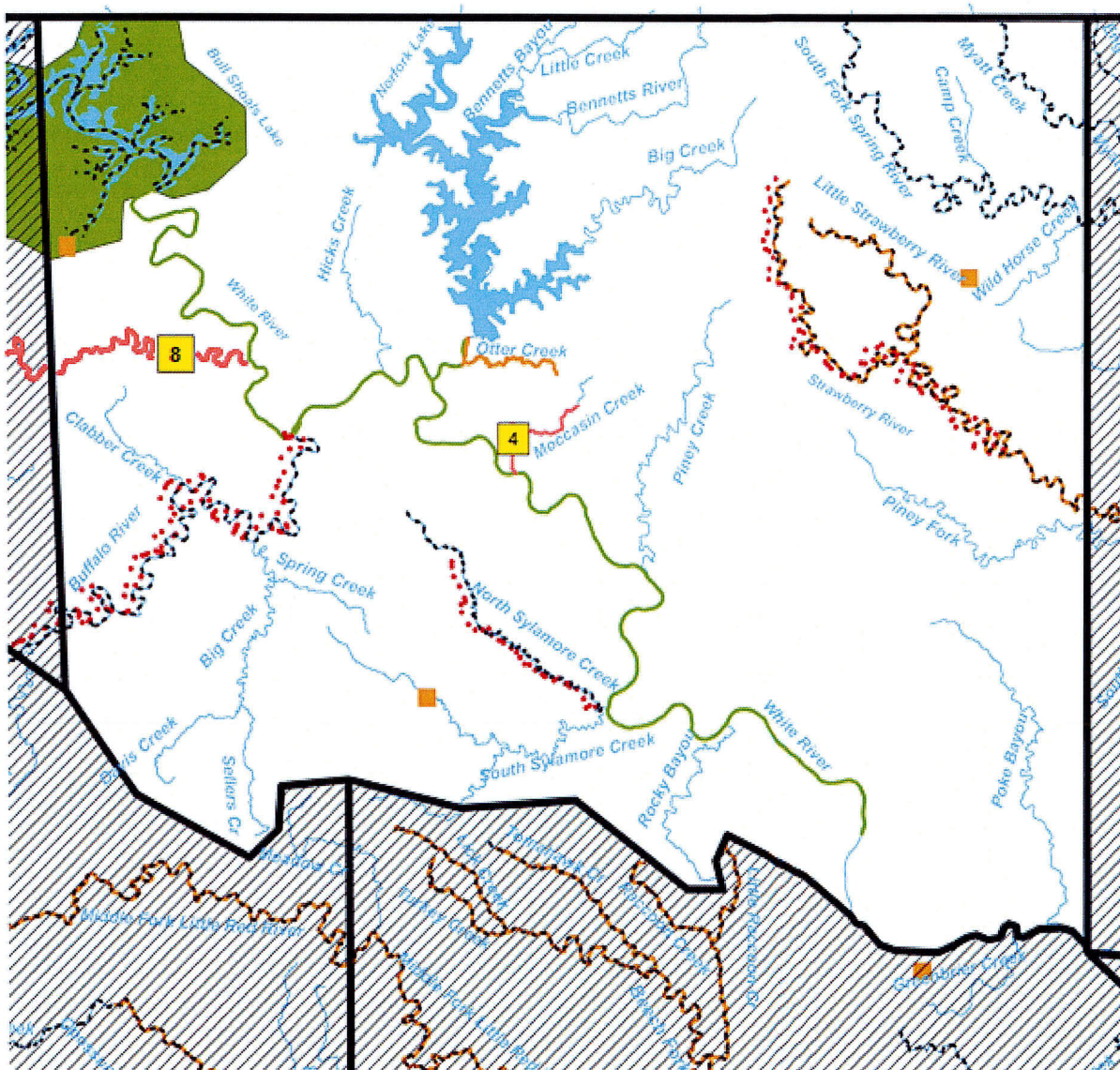


Plate OH-3 (Ozark Highlands)



LEGEND	
---	Extraordinary Resource Waters
•••	Natural and Scenic Waterways
—	Variation by UAA
■	Ecologically Sensitive Waterbodies
■	ESW Caves, Springs, and Seeps
—	Trout Waters



**ATTACHMENT B TO
LEGISLATIVE QUESTIONNAIRE**

EXECUTIVE SUMMARY

The City of Harrison owns and operates the Harrison Wastewater Treatment Plant (“HWWTP”) which discharges treated municipal wastewater under the provisions of NPDES Permit No. AR0034321 issued by ADEQ. The City of Yellville owns and operates the Yellville Wastewater Treatment Plant (“YWWTP”) which discharges treated municipal wastewater under the provisions of NPDES Permit No. AR0034037 issued by ADEQ. Both Cities discharge the treated wastewater to Crooked Creek in Boone and Marion Counties.

Because the Cities’ permits contain, or will contain, final discharge limits for chloride (Cl) sulfate (SO₄) and total dissolved solids (TDS) based upon Arkansas water quality standards (“WQS”) for Crooked Creek, the Cities evaluated alternatives through a Use Attainability Analysis (UAA) which included field studies, toxicity testing, mass balance modeling, engineering analysis of alternatives for discharge and treatment, and an analysis of designated uses for Crooked Creek.

Based upon the UAA, Harrison seeks modification to APCEC Regulation No. 2 WQS for Cl, SO₄ and TDS for Crooked Creek from the outfall of the HWWTP to ADEQ Monitoring Station WH10193 as follows: Cl from 20 mg/L to 22.6 mg/L; SO₄ from 20 mg/L to 24.4 mg/L; and TDS from 200 mg/L to 269 mg/L. Based on the UAA, Yellville seek modification to Regulation No. 2 WQS for TDS from 200 mg/L to 238 mg/L for Crooked Creek from ADEQ Monitoring Station WH10193 to the mouth of Crooked Creek.

The Cities’ proposed site-specific modifications are supported by the following:

- Harrison and Yellville are not seeking a change from historical water quality conditions in Crooked Creek; rather the Cities seek WQS that reflect current water quality and allow them to continue to be compliant with their NPDES Permits while protecting the designated uses for Crooked Creek;
- TDS concentrations upstream of both the HWWTP and the YWWTP discharges exceed the current site-specific standard of 200 mg/L;
- UAA data established that the requested changes should have no adverse effect on the aquatic life;
- Toxicity testing on *Ceriodaphnia dubia* using HWWTP and YWWTP effluent indicate that there is a low potential for toxicity due to mineral concentrations;
- Setting the Cl, SO₄ and TDS at the site-specific levels requested in these segments of Crooked Creek should not cause acute or chronic toxicity;
- There is no current economically feasible treatment technology for the removal of the minerals. Reverse osmosis treatment technology does exist; however, it is not cost effective, it generates a concentrated brine which is environmentally difficult to dispose of, is not required to meet the designated uses, and would produce no significant additional environmental protection.
- 40 CFR 131.11(b)(1)(ii) provides states with the opportunity to adopt water quality standards that are “modified to reflect site-specific conditions.”

- The basis for site-specific standards is set forth in 40 CFR 131.10(g)(6) which provides that the state may establish less stringent criteria if controls more stringent than those required by section 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.