EXHIBIT D

LEGISLATIVE QUESTIONNAIRE AND FINANCIAL IMPACT STATEMENT

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

| DEPARTMENT/AGENCY Arkansas Department of Environmental Quality | | | | | | | | |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------|--------------------|----------------------|--------------------|--|--|
| DI | VISION | Water Division | 1 | | | | | |
| DI | VISION DIRECTOR | Caleb Osborne | | | | | | |
| C | ONTACT PERSON | Caleb Osborne | ; | | | | | |
| ΑI | DDRESS | 5301 Northsho | re Drive, North Little Ro | ck, AR | 72118 | | | |
| PHONE NO. 682-0665 NAME OF PRESENTER ATMEETING | | FAX N F COMMITTE | EE | IAIL | osborne b Osborne | c@adeq.state.ar.us | | |
| PR | RESENTER E-MAIL ag | ates@mwlaw.c | om osbornec@adeq.st | ate.ar.us | 1 | w i | | |
| C. | B. Please answer each question <u>completely</u> using layman terms. You may use additional sheets, if necessary. 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: Donna K. Davis Administrative Rules Review Section | | | | | | | |
| **: | Arkansas Legislative Council Bureau of Legislative Research One Capitol Mall, 5 th Floor Little Rock, AR 72201 | | | | | | | |
| | What is the short title of th | Arkans is No. 2, | as Pollution Control and Regulation Establishing of the State of Arkansas | Ecology Water Q | Commiss | sion Regulation | | |
| 2. rul | What is the subject of the pe? | proposed | Modification of the Arka (WQS) for a segment of Wastewater Treatment P Station WH10052. | the Whit | e River fr | om the Noland | | |
| 3. | 3. Is this rule required to comply with a federal statute, rule, or regulation? Yes \(\subseteq \) No \(\subseteq \) If yes, please provide the federal rule, regulation, and/or statute citation. | | | | No 🖂 | | | |
| 4. ru | 4. Was this rule filed under the emergency provisions of the Administrative | | | No 🖂 | | | | |
| | When does the emergency | rule _ | | | | | | |

| Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act? S. Is this a new rule? Yes No Mile If yes, please provide a brief summary explaining the regulation. Does this repeal an existing rule? Yes No Mile 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. Is this an amendment to an existing rule? Is this an amendment to an existing rule? Yes No No Mile 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." 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 this proposed rule? Why is it necessary? The purpose of the proposed rule is to amend APCEC Regulation No. 2 to modify the chloride, sulfate and total dissolved solids ("TDS") water quality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan to ADEQ monioring Station WH10052. The rule is necessary to modify the chloride, sulfate and TDS criteria to levels that reflect current and historic water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm If yes, please complete the following: Date: | ex | xpire? |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does this repeal an existing rule? Yes No 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. No Is this an amendment to an existing rule? Yes 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." 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. § 8-4-101, et seq. and Ark. Act 401 of 1997, ARK. CODE ANN. § 8-5-901 et seq. 7. What is the purpose of this proposed rule? Why is it necessary? The purpose of the proposed rule is to amend APCEC Regulation No. 2 to modifiy the chloride, sulfate and total dissolved solids ("TDS") water quality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan to ADEQ monioring Station WH10052. The rule is necessary to modify the chloride, sulfate and TDS criteria to levels that reflect current and historic water quality conditions which are affected by naturally occurring conditions. The site-specific water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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). http://www.adeq.state.ar.us/regs/drafts/draft regs.htm 9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following: Time: 6:000 p.m. Place: Time: 6:000 p.m | | |
| 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 a new rule? Yes \(\sum \) No \(\sum \) If yes, please provide a brief summary explaining the regulation |
| rule? Yes ⋈ 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." 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 this proposed rule? Why is it necessary? The purpose of the proposed rule is to amend APCEC Regulation No. 2 to modify the chloride, sulfate and total dissolved solids ("TDS") water quality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan to ADEQ monioring Station WH10052. The rule is necessary to modify the chloride, sulfate and TDS criteria to levels that reflect current and historic water quality conditions which are affected by naturally occurring conditions. The site-specific water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm 9. Will a public hearing be held on this proposed rule? Yes ⋈ No ☐ If yes, please complete the following: Date: Time: 6:00 p.m Place: Time: 6:00 p.m Place: Time: 6:00 p.m | | 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 |
| 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 this proposed rule? Why is it necessary? The purpose of the proposed rule is to amend APCEC Regulation No. 2 to modify the chloride, sulfate and total dissolved solids ("TDS") water quality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan to ADEQ monioring Station WH10052. The rule is necessary to modify the chloride, sulfate and TDS criteria to levels that reflect current and historic water quality conditions which are affected by naturally occurring conditions. The site-specific water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm 9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following: Date: Time: 6:00 p.m Place: 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | rul | e? Yes No No No Startive changes 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 |
| amend APCEC Regulation No. 2 to modifiy the chloride, sulfate and total dissolved solids ("TDS") water quality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan to ADEQ monioring Station WH10052. The rule is necessary to modify the chloride, sulfate and TDS criteria to levels that reflect current and historic water quality conditions which are affected by naturally occurring conditions. The site-specific water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm 9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following: Date: Time: 6:00 p.m Place: 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | 6. | Code citation. Act 472 of 1949, as amended, ARK. CODE ANN. § 8-4-101, et seq. and Ark. Act 401 of |
| historic water quality conditions which are affected by naturally occurring conditions. The site-specific water quality criteria modifications will not adversely affect the aquatic life. There are no economically feasible treatment technologies capable of reducing the dissolved mineral concentration to levels of the current standards in the affected segment of the WhiteRiver. 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/drafts/draft_regs.htm 9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following: Date: Time: 6:00 p.m Place: 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | am qua | end APCEC Regulation No. 2 to modifiy the chloride, sulfate and total dissolved solids ("TDS") water ality criterion for a portion of the White River from the outfall of the Noland Wastewater Treatment Plan |
| required by Arkansas Code § 25-19-108(b). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm 9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following: Date: Time: 6:00 p.m Place: 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | wa fea | toric water quality conditions which are affected by naturally occurring conditions. The site-specific ter quality criteria modifications will not adversely affect the aquatic life. There are no economically sible treatment technologies capable of reducing the dissolved mineral concentration to levels of the |
| If yes, please complete the following: Date: Time: 6:00 p.m Place: 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | 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). http://www.adeq.state.ar.us/regs/drafts/draft_regs.htm |
| 10. When does the public comment period expire for permanent promulgation? (Must provide a date.) | 9. | If yes, please complete the following: Date: Time: 6:00 p.m |
| The public comment period expires ten days after the public hearing unless extended by the Commission | | . When does the public comment period expire for permanent promulgation? (Must provide a date.) |

| 11. What is the proposed effective date of this proposed rule? (Must provide a date.) June 2017 | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 12. Do you expect this rule to be controversial? Yes No No If yes, please explain. | |
| 13. 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 Department of Health Arkansas Natural Resources Commission Region VI, US Environmental Protection Agency Arkansas Game and Fish Commission Against: Unknown | |

FINANCIAL IMPACT STATEMENT

PLEASE ANSWER ALL QUESTIONS COMPLETELY

| DEPARTMENT DIVISION | | | | | rironmental Quality | - | | | |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------|--------------|--|--|
| | | | Water Division | | | 11. T. T. D. South - Market Market | | | |
| | | | TING THIS S | | | | | | |
| TE | LEPH | HONE NO. | 688-8816 | _FAX NO | EMAIL: agate | es@mwlaw. | com | | |
| To Sta | o comp ateme | oly with Ark. nt and file tw | Code Ann. § 2 copies with the | 5-15-204(e), p ne questionnai | lease complete the following re and proposed rules. | Financial I | mpact | | |
| SHORT TITLE OF THIS RULE | | | THIS RULE | Arkansas Pollution Control and Ecology Commission Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas. | | | | | |
| 1. | Does | s this propos | ed, amended, or | repealed rule | have a financial impact? | Yes 🗌 | No 🖂 | | |
| 2. | econ | omic, or other | | information av | ble scientific, technical, vailable concerning the he rule? | Yes 🖂 | No 🗌 | | |
| 3. | . In consideration of the alternatives to the agency to be the least costly rule co | | | es to this rule, rule considered | was this rule determined by 1? | Yes 🖂 | No 🗌 | | |
| If an agency is proposing a more costly rule, please state the following: | | | | | | | | | |
| | (a) | How the ad | ditional benefits | s of the more c | ostly rule justify its additiona | al cost; | | | |
| | (b) The reason for adoption of the more costly rule; | | | | | | | | |
| | (c) Whether the more costly rule if so, please explain; and; | | | le is based on | the interests of public health, | , safety, or v | welfare, and | | |
| | (d) | Whether the reason is within the scope of the agency's statutory authority; and if so, please explain. | | | | | | | |
| 4. | If the | If the purpose of this rule is to implement a federal rule or regulation, please state the following: | | | | | | | |
| | (a) | (a) What is the cost to implement the federal rule or regulation? | | | | | | | |
| | <u>Cur</u> | rent Fiscal | <u>Year</u> | | Next Fiscal Year | | | | |
| | Fed Cas Spe | neral Revenu eral Funds h Funds cial Revenue er (Identify) | | | Cook Funda | | | | |

| | Total | \$ 0 | Total | \$ 0 | | | |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--|--|--|
| | (b) What is the | additional cost of the state rule? | , | | | | |
| | Current Fiscal Y | <u>'ear</u> | Next Fiscal Year | | | | |
| | General Revenue Federal Funds Cash Funds Special Revenue Other (Identify) | | Federal Funds Cash Funds | | | | |
| | Total | \$ 0 | Total | \$ 0 | | | |
| 5. <u>Cı</u> \$ | What is the total esthe proposed, amerexplain how they a urrent Fiscal Year | | rivate individual, entite entity(ies) subject to the entity (ies) subject to the entit | the proposed rule and | | | |
| 6. <u>Cı</u> | What is the total estimplement this rulaffected. urrent Fiscal Year | estimated cost by fiscal year to state le? Is this the cost of the program of | , county, and municipal or grant? Please explains the second of the seco | in how the government is | | | |
| | | | | | | | |
| 7. | or obligation of at private entity, private | e agency's answers to Questions #5 least one hundred thousand dollars vate business, state government, cou f those entities combined? | (\$100,000) per year t | o a private individual, | | | |
| | Yes 🗌 No 🖂 | | | | | | |
| | If YES, the agency is required by Ark. Code Ann. § 25-15-204(e)(4) to file written findings at the time of filing the financial impact statement. The written findings shall be filed simultaneously with the financial impact statement and shall include, without limitation, the following: | | | | | | |
| (1) a statement of the rule's basis and purpose; | | | | | | | |
| | (2) the problem the a rule is require | e agency seeks to address with the red by statute; | proposed rule, includi | ng a statement of whether | | | |
| | | of the factual evidence that: s the agency's need for the propose | d rule; and | | | | |

- (b) describes how the benefits of the rule meet the relevant statutory objectives and justify the rule's costs;
- (4) a list of less costly alternatives to the proposed rule and the reasons why the alternatives do not adequately address the problem to be solved by the proposed rule;
- (5) a list of alternatives to the proposed rule that were suggested as a result of public comment and the reasons why the alternatives do not adequately address the problem to be solved by the proposed rule;
- (6) a statement of whether existing rules have created or contributed to the problem the agency seeks to address with the proposed rule and, if existing rules have created or contributed to the problem, an explanation of why amendment or repeal of the rule creating or contributing to the problem is not a sufficient response; and
- (7) an agency plan for review of the rule no less than every ten (10) years to determine whether, based upon the evidence, there remains a need for the rule including, without limitation, whether:
 - (a) the rule is achieving the statutory objectives;
 - (b) the benefits of the rule continue to justify its costs; and
 - (c) the rule can be amended or repealed to reduce costs while continuing to achieve the statutory objectives.

ATTACHMENT A TO LEGISLATIVE QUESTIONNAIRE

(MARK UP OF PROPOSED AMENDMENT TO APCEC REGULATION No. 2)

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 January 27, 2017

| Little Red River (including Greers Ferry Reservoir) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Black River |
| 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 Myatt Creek 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 Crooked Creek 20 20 200 White River (Missouri line to headwaters; including 20 20 200 White River (Missouri line to headwaters; including 20 20 160 Beaver Reservoir) White River from Noland WWTP to 0.4 miles 44† 60† 362† downstream (WR-02) 40† 237† Kings River 20 20 150 St. Francis River Basin St. Francis River Basin St. Francis River (Mouth to 36° N. Lat.) 10 30 330 L'Anguille River 20 30 355 Ditch No. 27 ER 480 1200 Ditch No. 6 (mouth to Ditch No. 6 confluence) 20 30 355 Ditch No. 6 (mouth to Ditch No. 6 confluence) ER 210 630 Tyronza River (mouth to Ditch No. 6 confluence) 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 |
| Eleven Point River 20 30 270 Stennitt Creek ER ER 456* South Fork Spring River 20 30 270 Myatt Creek 20 30 270 Myatt River (Dam #3 to Missouri line, including Bull Shoals Reservoir) 20 20 200 200 Crooked Creek 20 20 200 Mhite River (Missouri line to-headwaters, including 20 20 200 Mhite River (Missouri line to-headwaters, including 20 20 200 Mhite River from Noland WWTP to 0.4 miles 44† 60† 362† 40mstream (WR-02) Mhite River from WR-02 to WH10052 30† 40† 237† 40mstream (WR-02) Mhite River from WR-02 to WH10052 30† 40† 237† 20 20 150 20 20 20 20 20 20 20 |
| Eleven Point River 20 30 270 Stennitt Creek South Fork Spring River 20 30 270 Myatt Creek 20 20 30 270 Myatt Creek 20 20 200 Myatt Creek 20 20 200 Crooked Creek 20 20 200 200 Myatt River (Missouri line to headwaters, including 20 20 160 Myatt River (Missouri line to headwaters, including Beaver Reservoir) Myatt River from Noland WWTP to 0.4 miles 44† 60† 362† downstream (WR-02) Myatt River from WR-02 to WH10052 30† 40† 237† Myatt River from WR-02 to WH10052 30† 40† 237† Myatt River House 20 20 150 Myatt Fork White River 20 30 330 235 Myatt Fork White River 20 30 330 235 Myatt Fork White River 20 30 335 Myatt Fork White River 20 30 350 Myatt Fork White River 20 30 365 |
| Stennitt Creek ER Stendard Stennitt Creek South Fork Spring River 20 30 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 27 |
| South Fork Spring River 20 30 270 Myatt Creck 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 Crooked Creek 20 20 200 White River (Missouri line to headwaters; including 20 20 160 Beaver Reservoir) White River from Noland WWTP to 0.4 miles 44† 60† 362† downstream (WR-02) White River from WR-02 to WH10052 30† 40† 237† 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 30 355 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 30 365 Pemiscot Bayou 20 30 365 Pemiscot Bayou 20 30 365 Pemiscot Bayou 20 30 380 St. Francis River Basin 38900 Bartholomew 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 40 330 |
| Myatt Creek 20 30 270 Current River (Dam #3 to Missouri line, including Bull Shoals Reservoir) 20 20 180 Buffalo River 20 20 200 Crooked Creek 20 20 200 White River (Missouri line to headwaters; including Beaver Reservoir) |
| Current River White River (Dam #3 to Missouri line, including Bull |
| White River (Dam #3 to Missouri line, including Bull Shoals Reservoir) Buffalo River Crooked Creek White River (Missouri line to headwaters; including Beaver Reservoir) White River from Noland WWTP to 0.4 miles downstream (WR-02) White River from WR-02 to WH10052 Kings River West Fork White River St. Francis River Basin St. Francis River (Mouth to 36° N. Lat.) L'Anguille River Tyronza River (headwaters to Ditch No. 6 confluence) Ditch No. 27 Ditch No. 6 (mouth to Ditch No. 27 confluence) Little River Pemiscot Bayou St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Overflow Creek Ditch Ro. 20 Di |
| Shoals Reservoir 20 |
| Buffalo River |
| Crooked Creek 20 20 200 200 200 White River (Missouri line to headwaters; including 20 20 160 Beaver Reservoir) |
| White River (Missouri line to-headwaters; including Beaver Reservoir) 20 20 160 White River from Noland WWTP to 0.4 miles downstream (WR-02) 44† 60† 362† White River from WR-02 to WH10052 30† 40† 237† Kings River 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 30 350 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 8 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek |
| Beaver Reservoir) White River from Noland WWTP to 0.4 miles downstream (WR-02) White River from WR-02 to WH10052 30† 40† 237† 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 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 Reserved 44† 60† 362† 237† 237† 237† 40† 237† 237† 40† 237† 237† 40† 237† 237† 40† 237† 237† 40† 237† 237† 40† 237† 237† 500 330 330 500 330 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 500 350 |
| White River from Noland WWTP to 0.4 miles 44† 60† 362† downstream (WR-02) White River from WR-02 to WH10052 30† 40† 237† 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 30 365 Pemiscot Bayou 20 30 380 St. Francis River (36° N. Lat. to 36° 30' N. Lat.) 10 20 180 Ouachita River Basin 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 |
| Monte River from WR-02 to WH10052 30† 40† 237† |
| White River from WR-02 to WH10052 30† 40† 237† Kings River 20 20 150 West Fork White River 20 20 150 St. Francis River Basin 30 330 235 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 30 365 Pemiscot Bayou 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 8 20 500 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 |
| 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 |
| 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 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 |
| St. Francis River Basin St. Francis River (Mouth to 36° N. Lat.) L'Anguille River Tyronza River (headwaters to Ditch No. 6 confluence) 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) Little River Pemiscot Bayou St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Bayou Macon St. Francis River St. Francis River St. |
| 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 |
| L'Anguille River Tyronza River (headwaters to Ditch No. 6 confluence) Ditch No. 27 Ditch No. 6 (mouth to Ditch No. 27 confluence) ER 480 1200 Ditch No. 6 (mouth to Ditch No. 27 confluence) Tyronza River (mouth to Ditch No. 6 confluence) Little River Pemiscot Bayou St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Bayou Macon Description: 20 30 350 ER 480 1200 630 350 20 30 365 Pemiscot Bayou 20 30 380 St. Francis River (36° N. Lat. to 36° 30' N. Lat.) 10 20 180 |
| Tyronza River (headwaters to Ditch No. 6 confluence) Ditch No. 27 ER 480 1200 Ditch No. 6 (mouth to Ditch No. 27 confluence) Tyronza River (mouth to Ditch No. 6 confluence) ER 210 630 Tyronza River (mouth to Ditch No. 6 confluence) Little River 20 30 365 Pemiscot Bayou St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Bayou Macon Bayou Macon Description |
| 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 |
| 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 Sayou Bartholomew 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 40 330 Description: |
| Tyronza River (mouth to Ditch No. 6 confluence) Little River 20 30 365 Pemiscot Bayou St. Francis River (36° N. Lat. to 36° 30' N. Lat.) Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Bayou Macon Bayou Macon Depart Primer |
| 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 |
| 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 |
| St. Francis River (36° N. Lat. to 36° 30' N. Lat.) 10 20 180 Ouachita River Basin 50 20 500 Bayou Bartholomew 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 40 330 |
| Ouachita River Basin Bayou Bartholomew Chemin-A-Haut Creek Overflow Creek Bayou Macon Bayou Macon Bayou Missing Bayou Missing Bayou Macon Bayou Missing Bayou Macon Bayou Missing Bayou Macon Bayou Missing Bayou Missing Bayou Macon Bayou Missing Bayou Macon Bayou Missing Bayou Macon Bayou Missing Bayou Macon Bayou Missing Bayou Missin |
| Bayou Bartholomew 50 20 500 Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 40 330 |
| Chemin-A-Haut Creek 50 20 500 Overflow Creek 20 30 170 Bayou Macon 30 40 330 |
| Overflow Creek 20 30 170 Bayou Macon 30 40 330 |
| Bayou Macon 30 40 330 |
| Dof D: |
| Roelit River |
| P: G : G : |
| Big Cornie Creek 230 30 500 |
| Little Cornie Creek 200 10 400 |
| Three Creeks 250 10 500 |
| Little Cornie Bayou 200 500 |
| Unnamed trib from GLCC 003 538* 35* 519* |
| |
| Unnamed trib to Little Cornie Bayou 305* ER 325* |
| II 1. The Third Co. 1 D |

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

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)

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

White River - from Noland WWTP to 0.4 miles downstream (WR-02), chloride = 44 mg/L, sulfate = 79 mg/L, TDS = 362 mg/L (OH-1, #7) †

White River - from WR-02 to WH10052, chloride = 30 mg/L, sulfate = 40 mg/L, TDS = 237 mg/L (OH-1, #8) †

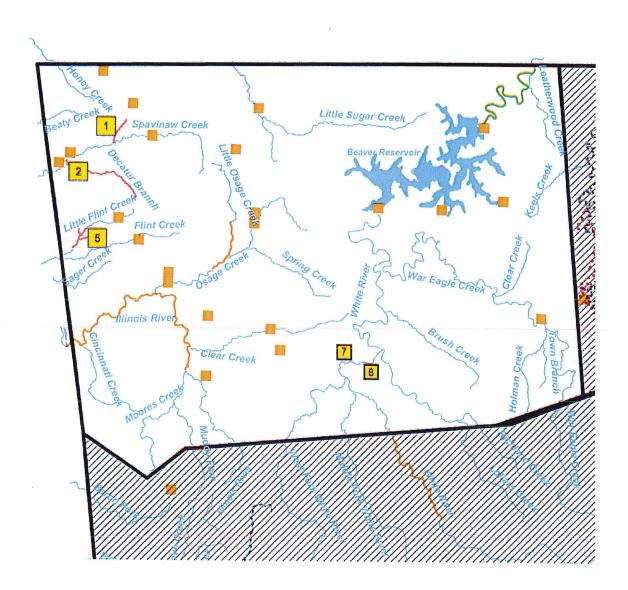
^{*}As designated in the National Wild and Scenic Rivers System

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

Plate OH-1 (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)

EXECUTIVE SUMMARY

The City of Fayetteville owns and operates the Paul R. Noland Wastewater Treatment Plant ("Noland WWTP") which discharges treated municipal wastewater under the provisions of NPDES Permit No. AR0020010 issued by ADEQ. The Noland WWTP treats the municipal wastewater from the cities of Fayetteville, Elkins, Greenland, sometimes Farmington and Johnson, as well as industrial and commercial enterprises, and discharges the treated wastewater via Outfall 001 to the White River in Washington County.

Because Fayetteville's permit contains final discharge limits for chloride (Cl) sulfate (SO₄) and total dissolved solids (TDS) based upon Arkansas water quality standards for the White River, Fayetteville evaluated alternatives through a Use Attainability Analysis (UAA) and a UAA Addendum which included field studies, toxicity testing, mass balance modeling, engineering analysis of alternatives for discharge and treatment, and an analysis of designated uses for the White River.

Based upon the UAA and the UAA Addendum, Fayetteville is requesting the following site-specific modification to APCEC Regulation No. 2:

modify the Cl, SO₄ and TDS standards for the White River from the outfall of Fayetteville's Noland WWTP outfall to a point 0.4 miles downstream (WR-02), as follows: Cl from 20 mg/L to 44 mg/L, SO4 from 20 mg/L to 79 mg/L and TDS from 160 mg/L to 362 mg/L; and

modify the Cl, SO_4 and TDS standards for the White River from WR-02 to ADEQ Monitoring Station WH10052 (WR-03), as follows: Cl from 20 mg/L to 30 mg/L, SO_4 from 20 mg/L to 40 mg/L and TDS from 160 mg/L to 237 mg/L.

Fayetteville's proposed site-specific modifications are supported by the following:

- Fayetteville is not seeking a change from historical water quality conditions in the White River; rather Fayetteville seeks a site-specific modification which allows the Noland WWTP to be compliant with its NPDES Permit while making certain that its effluent does not limit the attainment of any of the designated uses of the stream segments.
- UAA and UAA Addendum data established that:
 - o setting the Cl, SO₄ and TDS at the site-specific levels requested will not cause acute or chronic toxicity in this stream segment;
 - o setting the Cl, SO₄ and TDS at the site-specific levels requested will not impair existing or attainable designated uses, including aquatic life in this stream segment; and
 - o setting the Cl, SO₄ and TDS at the site-specific levels will not impair Beaver Lake.
- All sampling locations influenced by Noland WWTP's discharge showed the presence of ecoregion key and indicator species and species composition consistent with the

attainment of a Ozark Highlands fishery designated use. The requested changes will have no adverse effect on the aquatic life communities;

- Toxicity testing on *Ceridaphnia dubia and Pimphales promelas* using Noland WWTP effluent and spiked samples of the effluent showed no significant lethal or sub-lethal toxicity in either test organism at concentrations exceeding the levels requested herein;
- There are no current economically feasible treatment technologies for the removal of the minerals. Reverse osmosis treatment technology does exist; however, this technology is not cost effective and generates a concentrated brine which is environmentally difficult to dispose of. The technology is not required to meet the designated uses and even if implemented would produce no significantly increased environmental protection.
- The basis for site-specific standards is provided in 40 CFR 131.10(g). Fayetteville's request for the modifications set forth above is supported by 40 CFR 131.10(g)(6) which provides that the state may establish less stringent criteria if controls more stringent that those required by section 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.
- 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."