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CASE NO. \_\_\_\_\_

**FILED**

IN THE UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

APR 21 2022

MICHAEL GANS  
CLERK OF COURT

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT,  
DIVISION OF ENVIRONMENTAL QUALITY  
PETITIONER,

**22-1831**

V.

U.S. ENVIRONMENTAL PROTECTION AGENCY; MICHAEL  
REGAN, IN HIS OFFICIAL CAPACITY AS ADMINISTRATOR OF  
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,  
RESPONDENTS.

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**PETITION FOR REVIEW**

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Pursuant to Section 509 (b)(1)(E) of the Clean Water Act (CWA), 33 U.S.C. § 1369(b)(1)(E), the Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) petitions this Court for review of the U.S. Environmental Protection Agency's (EPA or the Agency) procedurally and substantively unlawful promulgation of effluent limitations for implementation in DEQ's EPA-authorized National Pollutant Discharge Elimination System (NPDES) permit program under the CWA. *See* 33 U.S.C. § 1342(b). Specifically, DEQ challenges effluent limitations promulgated by EPA in excess of its authority under the CWA and in violation of the procedural mandates

of the Administrative Procedure Act (APA), 5 U.S.C. §§ 551 et seq. These final agency actions were unequivocally announced in letters sent from the EPA Region 6 Water Division Director, Charles Maguire, to DEQ's Alan York. *See* Exs. A, B, C.

EPA's letters mandate that DEQ impose certain numerical limits for phosphorus in CWA NPDES permits. The letters and limits act as legislative rules that were not developed in accordance with the APA's notice and comment rulemaking requirements, 5 U.S.C. § 553, and impermissibly force DEQ to adopt statewide effluent limits for phosphorus or relinquish its permitting authority under its state NPDES permit program. *See* 33 U.S.C. § 1342(d).

This Court has subject matter jurisdiction over illegally promulgated effluent limitations announced in official Agency correspondence that bind DEQ's permitting discretion while threatening the validity of permits issued pursuant to Arkansas state law. *See Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013). DEQ is pursuing a corresponding lawsuit in the Eastern District of Arkansas seeking declaratory and injunctive relief related to EPA's noncompliance with the statutory and regulatory mechanisms for

appropriate federal oversight of state delegated NPDES permitting programs. This Petition is timely. *See* 33 U.S.C. § 1369(b)(1).

Dated: April 21, 2022

Respectfully Submitted,

/s/ David P. Ross

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# EXHIBIT A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270

December 30, 2021

Alan York  
Associate Director  
Office of Water Quality  
Division of Environmental Quality  
Arkansas Department of Energy and Environment  
5301 North Shore Drive North Little Rock, AR 72118-5317

Re: Notification of Invalid NPDES Permit, and  
General Objection to Proposed NPDES Permit for  
Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities  
NPDES Permit No. AR0022063

Dear Mr. York:

The U.S. Environmental Protection Agency (EPA) is in receipt of your email dated December 3, 2021, notifying the EPA of the Arkansas Division of Environmental Quality's (ADEQ) issuance of Permit Number AR0022063 to Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities (Springdale) on December 1, 2021. This letter is to notify you that ADEQ's issuance of the Springdale permit violated the provisions of Clean Water Act (CWA) Section 402, federal implementing regulations at 40 CFR Part 123, and the Memorandum of Agreement signed between the EPA and the Arkansas Pollution Control and Ecology Commission (APC&EC) upon approval of the State of Arkansas to implement the National Pollutant Discharge Elimination System (NPDES) program ("the MOA"). Consequently, the December 1, 2021, permit is not a validly issued final NPDES permit. Instead, the EPA has determined the December 1, 2021, permit to be a proposed permit subject to EPA review under CWA Section 402(d), 40 C.F.R. 123.44(j) and Section III.B.11 of the MOA.

In addition, following review of the December 1, 2021, proposed permit, which was received by the EPA on December 3, 2021, the EPA is hereby exercising its authority under Section 402(d) of the CWA, federal regulations at 40 C.F.R. 123.44(b), and Section III.B. of the MOA to generally object to this permit for the general reasons described herein. In accordance with 40 C.F.R. 123.44(b)(2) and MOA Section III.B.11, the EPA will, within 90 days of receipt of the December 1, 2021, proposed permit, follow this general objection with a specific objection setting forth in greater detail the reasons for the objection, including the section of the CWA or regulations supporting the objection, and the actions that must be taken by the ADEQ to eliminate the objection. Within 90 days of receipt of the EPA's specific objection, the State or any interested party may request a public hearing on the objection. If no public hearing is held and the ADEQ does not resubmit a permit that addresses the EPA's objections within 90 days of receipt of the specific objection, exclusive authority to issue the permit will pass to the EPA. See 40 C.F.R. 123.44(e), (f), (g), and (h) and MOA Sections III.B.11 and 12.

**I. The Permit issued to Springdale by the ADEQ on December 1, 2021, was not issued in accordance with the requirements of the CWA, federal regulations, or the MOA, and is therefore not a validly issued NPDES permit effective for CWA purposes. Instead, the December 1, 2021, permit is a proposed permit as defined under 40 C.F.R. 122.2.**

Per 40 C.F.R. 123.44(j), if the EPA agrees in the Memorandum of Agreement with an authorized state, as it did in the Arkansas MOA, to review draft permits rather than proposed permits<sup>1</sup>, the authorized state is not required to send the proposed permit to the EPA “unless the State proposes to issue a permit which differs from the draft permit reviewed by the Regional Administrator, the Regional Administrator has objected to the draft permit, or there is significant public comment.” This requirement cannot be waived in an authorization Memorandum of Agreement, and is, in fact, echoed in the Arkansas MOA:

If (a) the proposed final permit is the same as or more stringent than the draft permit submitted to the EPA in accordance with Section III.B.7 of this MOA, and (b) the EPA has not objected to such draft permit, and (c) valid and significant public comments have not been made, the State may issue the permit without further review by the EPA. In all other cases, the State will send one copy of the proposed final permit and other information to the EPA. MOA Section III.B.11.

The EPA originally received the draft Springdale permit for review from the ADEQ on December 14, 2020. The draft permit included a total phosphorus (TP) limit of 1.0 mg/L based on a six-month rolling average, which the draft permit fact sheet stated was water quality-based. Upon initial review of the draft permit, the EPA did not object, but by letter dated January 13, 2021, offered comments and reminded the ADEQ that prior to the issuance of any final permit, the ADEQ’s Water Quality Management Plan would have to be approved by the EPA.

On December 3, 2021, the ADEQ notified the EPA via email that the ADEQ had issued the Springdale permit on December 1, 2021. The December 1, 2021, permit is fundamentally different from the draft permit reviewed by the EPA in December 2020. Although the TP limit in the draft permit reviewed by the EPA was stated by ADEQ to be water quality-based, the fact sheet for the December 1, 2021, permit states that the TP limit is technology-based. Despite the material differences in the December 1, 2021, permit and the draft permit reviewed by the EPA, the ADEQ did not submit the December 1, 2021, permit to the EPA for review prior to issuance.

In addition, significant public comment was received by the ADEQ regarding the draft Springdale permit. Comments were submitted by the Oklahoma Water Resources Board (OWRB), the Oklahoma Conservation Commission (OCC), and the Oklahoma Department of Environmental Quality (ODEQ) on March 16, 2021. The state of Oklahoma is downstream of Arkansas in the Illinois River Basin and its waters are thus affected by the ADEQ’s issuance of the Springdale permit. Comments were also

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<sup>1</sup> Federal regulations define *Draft permit* to mean “a document prepared under § 124.6 indicating the Director’s tentative decision to issue or deny, modify or revoke and reissue, terminate or reissue a ‘permit.’” *Proposed permit* is defined as “a State NPDES ‘permit’ prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for final review before final issuance by the State. A ‘proposed permit’ is not a ‘draft permit.’” 40 C.F.R. 122.2.

received from Save the Illinois River (STIR) on March 16, 2021, and the City of Bentonville, Arkansas, on March 15, 2021.

In its comments, the OWRB stated that it could not support an interim or final TP effluent limit expressed as a 6-month average. The OWRB stated that the ADEQ provided no rational basis for this change from the previous permit's TP limit, which was expressed as a monthly average or why the monthly average had become impractical as required by 40 CFR 422.45(d)(2). The OWRB also stated it could not support the two times per month monitoring frequency in conjunction with the rolling average method for determining TP effluent concentration as this was not adequate to evaluate the effluent quality, to ensure permit compliance or to ensure that TP loads are reduced sufficiently to meet the downstream Oklahoma water quality standards (WQS). The OWRB also sought clarification as to how phosphorus loads would be impacted by wet weather events.

In its comments, the OCC noted Arkansas and Oklahoma's shared a commitment to protect the Illinois River Basin and the importance of updating permits on both sides of the border in furtherance of that goal. However, the OCC stated it had significant concerns with the draft permit, questioning the switch to a TP effluent limit expressed as a 6-month average and the twice monthly TP sampling. The OCC also questioned the water quality impacts resulting from the draft permit's allowance for wet-weather based excursions from the daily load limit of 200.2 lbs per day based on the new six-month average. .

Like the OWRB and the OCC, the ODEQ expressed concerns with the use of a six-month rolling average to determine TP effluent concentration, arguing that the six-month rolling average is inherently less stringent than the existing monthly average, given that it would allow for greater variability and magnitude in effluent concentrations. The ODEQ stated there was no explanation or justification in the fact sheet as to why this change did not violate anti-backsliding regulations. Additionally, the ODEQ noted that the permit did not mention Oklahoma's designated use classification of the Illinois River as an Outstanding Resource Water and a Scenic River nor its status on Oklahoma's CWA Section 303(d) list as impaired for TP and *Escherichia coli*. The ODEQ further argued that the reasonable potential analysis provided by the ADEQ failed to assess whether the TP limit would be protective of WQSs for the initial receiving stream or of Oklahoma's downstream WQS. The ODEQ also noted that there was no indication of any analysis that had been done to assess the reasonable potential for metallic compounds to exceed Oklahoma's WQS. In addition, the ODEQ expressed concerns with the sampling type for most parameters being revised to composite versus 24-hour composite and with a full 5-year term being allowed for evaluation of a phosphorus reduction plan as the ODEQ felt these changes were not appropriate for such a large facility and that adequate data should already be available to evaluate reduction strategies, respectively.

STIR submitted comments objecting to the continued use of the 0.1 mg/L TP limit in reissuance of the permit when the technology exists to reduce it to 0.1 mg/L or lower, and also objected to the expression of the TP effluent limit as a 6-month rolling average. The City of Bentonville expressed concern with the Springdale facility being allowed to have a higher total phosphorus limit than NACA without having a phosphorus reduction plan in place.

Because the Springdale permit prepared by the ADEQ following the receipt of public comments (i.e., the proposed permit) differed from the draft permit reviewed by the EPA, and because the ADEQ received significant public comment on the draft permit, the ADEQ was required pursuant to 40

C.F.R.123.44(j) and Section III.B.11 of the MOA to resubmit the proposed permit to the EPA for review. The ADEQ did not do so, but instead issued a final permit on December 1, 2021.

Because the ADEQ did not provide the EPA with the proposed Springdale permit for review prior to issuance of the final permit as required by the NPDES regulations and the MOA, the December 1, 2021, permit is not a validly issued final NPDES permit. Instead, the December 1, 2021, permit is a proposed permit as defined under 40 C.F.R. 122.2. The EPA's determination that the December 1, 2021, permit is a proposed permit subject to EPA review, rather than a validly issued final NPDES permit, is supported by case law. See Champion International Corp. v. U.S. E.P.A., 850 F.2d 182 (4th Cir., 1988). See also In the Matter of: J&L Specialty Products Corp. Permit No. OH 0007188, 5 E.A.D. 31 (EAB 1994).

**II. The EPA generally objects to issuance of the Springdale permit pursuant to Section 402(d) of the CWA, federal regulations at 40 C.F.R. 123.44, and Section III.B. of the MOA.**

Based on our review of the December 1, 2021, proposed Springdale permit, which was received by the EPA on December 3, 2021, the EPA generally objects to the issuance of this permit based in general terms on the following:

- The procedures followed in connection with formulation of the proposed permit failed in a material respect to comply with the procedures required by the CWA, 40 C.F.R. Part 123 and the MOA. The ADEQ did not provide Oklahoma, a downstream state whose waters are affected by issuance of the Springdale permit, and the EPA written notification of its failure to accept Oklahoma's written recommendations with respect to the Springdale permit and its reasons for doing so as required by CWA Section 402(b)(5). See also MOA Section III.B.13. In addition, the ADEQ did not forward to the EPA the significant comments objecting to the draft permit and received in writing during the public comment period as required by Section III.B.13 of the MOA.
- The written recommendations from the State of Oklahoma regarding the Springdale permit were not accepted by the ADEQ and the EPA finds the reasons for rejecting the recommendations inadequate. As described above, during the public comment period for the draft permit, the OWRB, OCC, ODEQ, STIR and the City of Bentonville expressed significant concerns about the draft permit's use of a six-month rolling average, monitoring frequency/sampling type, the 1.0 mg/L TP limit and the reasonable potential summary statistics provided. It was recommended that the draft permit be revised to address these concerns. The ADEQ did not accept Oklahoma's recommendations and the EPA has determined the ADEQ's reasons for rejecting the recommendations to be inadequate.
- The TP effluent limit in the proposed permit fails to satisfy the requirements of the CWA and implementing regulations, including 40 C.F.R. 122.44 (d). The ADEQ has failed to demonstrate this limit is sufficient to protect all applicable WQS, including those of the downstream State of Oklahoma. The ADEQ states that the TP limit in the permit is technology-based.
- The TP effluent limit in the proposed permit violates the anti-backsliding provisions at CWA 402(0) and 40 C.F.R. 122.44(l).
- The TP permit limit is not consistent with the ADEQ's approved Water Quality Management Plan.



As noted above, this general objection letter describes the general nature of the EPA's objections in accordance with 40 C.F.R. 123.44(b)(1) and Section III.B.11 of the MOA. As required by 40 C.F.R. 123.44(b)(2) and MOA Section III.B.11, the EPA will follow this general objection with a specific objection setting forth in greater detail the reasons for the objection, including the section of the CWA or regulations supporting the objection, and the actions that must be taken by the ADEQ to eliminate the objection. In accordance with 40 C.F.R. 123.44(a)(1), the EPA has forwarded a copy of this objection letter to the permit applicant.

Thank you for your attention to this matter. If you have any questions or concerns, please feel free to contact me at 214-665-8138.

Sincerely,

*Charles Maguire*

Charles W. Maguire  
Director  
Water Division (6WD)

Cc: (electronic) Mr. Heath Ward, Executive Director, Springdale Water Utilities  
Ms. Becky Keogh, Cabinet Secretary, Arkansas Energy & Environment;  
Director, Arkansas Department of Environmental Quality  
Ms. Julie Linck, Administrator, Arkansas Energy & Environment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270

February 10, 2022

Alan York  
Associate Director  
Office of Water Quality  
Division of Environmental Quality  
Arkansas Department of Energy and Environment  
5301 North Shore Drive  
North Little Rock, AR 72118-5317

Re: Specific Objection to Proposed NPDES Permit for  
Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities  
NPDES Permit No. AR0022063

Dear Mr. York:

In accordance with Section 402(d) of the Clean Water Act (CWA), federal regulations at 40 C.F.R. 123.44(b), and Section III.B of the Memorandum of Agreement signed between the EPA and the Arkansas Pollution Control and Ecology Commission upon approval of the State of Arkansas to implement the National Pollutant Discharge Elimination System (NPDES) program ("the MOA"), the U.S. Environmental Protection Agency (EPA) is specifically objecting to the Division of Environmental Quality's (DEQ's, formerly the Arkansas Department of Environmental Quality or ADEQ) issuance of Permit Number AR0022063 to the Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities (Springdale) (hereinafter the "proposed permit").

This specific objection follows the EPA's letter to the DEQ dated December 30, 2021, notifying the DEQ of the EPA's determination that the December 1, 2021, Springdale permit is a proposed permit subject to EPA review and of the EPA's general objection to the Springdale permit ("General Objection Letter," enclosed and incorporated herein). As required by 40 C.F.R. 123.44(b)(2) and Section III.B.11 of the MOA, this specific objection describes in greater detail the reasons for the objection, including the Sections of the CWA or regulations supporting the objection, and the actions that must be taken by the DEQ to eliminate the objection. Within 90 days of receipt of the EPA's specific objection, the State or any interested person may request a public hearing on the objection. If no public hearing is held and the DEQ does not resubmit a permit that addresses the EPA's objections within 90 days of receipt of this objection, exclusive authority to issue the permit will pass to the EPA. See 40 C.F.R. 123.44(e), (f), (g), and (h) and MOA Sections III.B.11 and 12.

Based on our review of the December 1, 2021, proposed Springdale permit, which EPA received on December 3, 2021, and in accordance with 40 C.F.R. 122.44(c), the EPA specifically objects to the issuance of this permit on the following grounds:

**Item 1: The procedures followed in connection with formation of the proposed permit failed in a material respect to comply with procedures required by the CWA, regulations, and MOA (40 C.F.R. 123.44(c)(3)).**

During the public comment period for the draft Springdale permit, the Oklahoma Water Resources Board (OWRB) and the Oklahoma Conservation Commission (OCC) submitted written comments opposing the draft permit's use of a six-month average to express the final total phosphorus (TP) limit at Outfall 001 and the twice per month monitoring frequency in conjunction with the rolling average method for determining the TP effluent concentration. Both agencies felt that insufficient rationale had been provided to demonstrate why the use of a monthly average had become impracticable as required by 40 C.F.R. 422.45(d)(2). Additionally, they each expressed concerns about whether the proposed methodology would be adequate to consistently evaluate effluent quality for permit compliance or to ensure TP load reductions sufficient to attain Oklahoma's water quality standard (WQS) for TP.

Additional significant comments were received by Save the Illinois River, Inc. (STIR) and the City of Bentonville, Arkansas (Bentonville). STIR objected to the continued use of the 1.0 mg/L TP limit in the permit when the technology exists to reduce it to 0.1 mg/L or lower. STIR also objected to the proposed permit change to a six-month rolling average for TP testing instead of a seven-day average test. Bentonville objected to the Springdale facility being allowed a higher TP limit than the Northwest Arkansas Conservation Authority (NACA) facility, even though Springdale is only eight miles upstream of NACA and has no plans for reducing phosphorus loads to the watershed. Bentonville expressed concern that the DEQ is fostering delay in water quality improvements and providing some communities with unfair advantages by allowing such discrepancies in treatment levels for facilities located within the same watershed. The DEQ did not forward to the EPA the significant comments objecting to the draft permit received in writing during the public comment period as required by Section III.B.13 of the MOA. In addition, both 40 C.F.R. 123.44(j) and the MOA required the DEQ to forward the proposed Springdale permit to the EPA for review because the proposed permit differed from the draft permit that was previously reviewed by the EPA and because the DEQ had received significant public comment on the draft permit. (See detailed discussion in Section I of the EPA's December 30, 2021, General Objection Letter). The DEQ failed to comply with these regulatory and MOA requirements, which would have provided the EPA an opportunity to review the proposed permit before it was issued on December 1, 2021.

**Item 2: The effluent limits of the permit fail to satisfy the requirements of 40 C.F.R. 122.44(d) (40 C.F.R. 123.44(c)(8)).**

40 C.F.R. 122.44(d) requires permits to include, in pertinent part, requirements as necessary to:

- Achieve water quality standards established under Section 303 of the CWA, including state narrative criteria for water quality (40 C.F.R. 122.44(d)(1)).

The DEQ has failed to demonstrate that the 1.0 mg/L effluent limit for TP in the December 1, 2021, proposed permit will achieve or maintain either Arkansas's narrative nutrient WQS or the 0.037 mg/L TP water quality criterion of the downstream State of Oklahoma, as required by 40 C.F.R. 122.44(d)(1). The proposed permit fact sheet states that the effluent limits for TP are technology-based justified by Rule 2.509, the 2018 Memorandum of Agreement between the States of Arkansas and Oklahoma and the previous permit. (See Part 12.A of the Fact Sheet, Chart titled 'Justification for Limitations and Conditions of the Final Permit.)

There is nothing in the permit record to support the DEQ's assertion that the TP limit in the proposed permit is technology-based. Rule 2.509, adopted by the Arkansas Pollution Control and Ecology Commission, establishes the WQS for nutrients for waters of the State. In addition, although the fact sheet for the draft permit reviewed by the EPA in 2020 stated that the TP limit was water quality-based,


the justification for the technology-based TP effluent limit provided in the fact sheet for the proposed permit does not differ significantly from the justification provided for the TP limit in the draft permit. Regardless, the DEQ has not demonstrated that the 1.0 mg/L TP limit will be sufficient to achieve compliance with all applicable WQS, including any narrative criteria for water quality, as required by 40 C.F.R. 122.44(d). The 2018 MOA between the States of Arkansas and Oklahoma neither supersedes nor nullifies the requirements of the CWA or federal regulations. Based on our review of the proposed 1.0 mg/L TP effluent limit and the justification for the limit provided by the DEQ, the EPA cannot conclude that the proposed limit is sufficient to ensure compliance with Arkansas' narrative water quality criterion or Oklahoma's TP WQS.

To eliminate the EPA's specific objections to the proposed permit, the DEQ must revise the 1.0 mg/L TP limit in the proposed permit to reflect a 0.1 mg/L TP limit (as a 30-day average) at Outfall 001. The 0.1 mg/L TP limit is a water quality-based limit established under 40 C.F.R. 122.44(d) as a translation of Arkansas' narrative nutrient water quality criterion. It is based on the EPA's 304(a) Gold Book recommended criterion and has been determined sufficient to meet Oklahoma's 0.037 mg/L water quality criterion for TP. See 40 CFR 122.44(d)(1)(vi)(B).

In closing, the Illinois River watershed is an important resource for a diverse range of stakeholders, both public and private. Notably, the watershed holds significant cultural and natural resource importance to the Cherokee Nation, whose reservation is downstream of the discharge. By not ensuring the protection of the watershed's designated uses, the potential is increased for negative impacts to the Tribal Nation, as well as other communities with environmental justice concerns.

Thank you for your attention to this matter. If you have any questions or concerns, please feel free to contact me at 214-665-8138.

Sincerely,



Charles W. Maguire  
Director  
Water Division (6WD)

Enclosures

cc: (electronic)

Mr. Heath Ward, Executive Director, Springdale Water Utilities  
Ms. Becky Keogh, Cabinet Secretary, Arkansas Energy & Environment  
Director, Arkansas Department of Environment  
Ms. Julie Linck, Administrator, Arkansas Energy and Environment

# EXHIBIT B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270

December 30, 2021

Alan York  
Associate Director  
Office of Water Quality  
Division of Environmental Quality  
Arkansas Department of Energy and Environment  
5301 North Shore Drive North Little Rock, AR 72118-5317

Re: Notification of Invalid Final NPDES Permit and  
General Objection to Proposed NPDES Permit for  
Northwest Arkansas Conservation Authority  
NPDES Permit No. AR0050024

Dear Mr. York:

The U.S. Environmental Protection Agency (EPA) is in receipt of your email dated December 3, 2021, notifying the EPA of the Arkansas Division of Environmental Quality's (ADEQ) issuance of Permit Number AR0050024 to Northwest Arkansas Conservation Authority (NACA) on December 1, 2021. This letter is to notify you that ADEQ's issuance of the NACA permit violated the provisions of Clean Water Act (CWA) Section 402, federal implementing regulations at 40 CFR Part 123, and the Memorandum of Agreement signed between the EPA and the Arkansas Pollution Control and Ecology Commission (APC&EC) upon approval of the State of Arkansas to implement the National Pollutant Discharge Elimination System (NPDES) program ("the MOA"). Consequently, the December 1, 2021, NACA permit is not a validly issued final NPDES permit. Instead, the EPA has determined the December 1, 2021, permit to be a proposed permit subject to EPA review under CWA Section 402(d), 40 C.F.R. 123.44(j) and Section III.B.11 of the MOA.

In addition, following review of the December 1, 2021, proposed permit, which was received by the EPA on December 3, 2021, the EPA is hereby exercising its authority under Section 402(d) of the CWA, federal regulations at 40 C.F.R. 123.44(b), and Section III.B of the MOA to generally object to this permit for the general reasons described herein. In accordance with 40 C.F.R. 123.44(b)(2) and Section III.B.11 of the MOA, the EPA will, within 90 days of receipt of the December 1, 2021, proposed permit, follow this general objection with a specific objection setting forth in greater detail the reasons for the objection, including the Section of the CWA or regulations supporting the objection, and the actions that must be taken by the ADEQ to eliminate the objection. Within 90 days of receipt of the EPA's specific objection, the State or any interested person may request a public hearing on the objection. If no public hearing is held and the ADEQ does not resubmit a permit that addresses the EPA's objections within 90 days of receipt of the objection, exclusive authority to issue the permit will pass to the EPA. See 40 C.F.R. 123.44(e), (f), (g), and (h) and MOA Sections III.B.11 and 12.

**I. The Permit issued to NACA by the ADEQ on December 1, 2021, was not issued in accordance with the requirements of the CWA, federal regulations, or the MOA, and is therefore not a validly issued NPDES permit effective for CWA purposes. Instead, the December 1, 2021, permit is a proposed permit as defined under 40 C.F.R. 122.2.**

Per 40 C.F.R. 123.44(j), if the EPA agrees in the Memorandum of Agreement with an authorized state, as it did in the Arkansas MOA, to review draft permits rather than proposed permits,<sup>1</sup> the authorized state is not required to send the proposed permit to the EPA “unless the State proposes to issue a permit which differs from the draft permit reviewed by the Regional Administrator, the Regional Administrator has objected to the draft permit, or there is significant public comment.” This requirement cannot be waived in an authorization Memorandum of Agreement, and is, in fact, echoed in the Arkansas MOA:

If (a) the proposed final permit is the same as or more stringent than the draft permit submitted to the EPA in accordance with Section III.B.7 of this MOA, and (b) the EPA has not objected to such draft permit, and (c) valid and significant public comments have not been made, the State may issue the permit without further review by the EPA. In all other cases, the State will send one copy of the proposed final permit and other information to the EPA. MOA Section III.B.11.

The EPA originally received the draft NACA permit from ADEQ for review on October 28, 2020. The draft permit included tiered total phosphorus (TP) limits, a Tier I limit of 0.1mg/L TP based on a design flow of 3.6 MGD, and a Tier II limit of 0.5 mg/L based on an increased design flow of 7.2 MGD. The Tier I 0.1 mg/L TP limit was the same as in the previous permit. The draft permit also included mass load limits of 3 lbs/day at Tier I, which increased to 30 lbs/day at Tier II. Before transitioning to the Tier II limit, the permittee was required to notify the ADEQ within 30 day of construction completion provided the new system was fully operational. The draft permit fact sheet indicated the Tier II TP limit of 0.5 mg/L was based on a Memorandum of Agreement between the States of Arkansas and Oklahoma and was in accordance with Arkansas’ Continuing Planning Process (CPP) guidelines. The fact sheet also described the Tier II TP limit as water quality-based.

Upon initial review of the draft permit, the EPA did not object, but by letter dated November 23, 2020, offered comments and reminded the ADEQ that prior to the issuance of any final permit, the ADEQ’s Water Quality Management Plan would have to be approved by the EPA. However, after being made aware of Oklahoma’s opposition to the permit by the Oklahoma Water Resources Board (OWRB) on January 19, 2021, the EPA asked for additional information by telephonic meeting on January 26, 2021. On February 11, 2021, the EPA followed up with a supplemental letter to the ADEQ requesting additional information and explanation on several items, including an analysis of how the Tier II TP limit of 0.5 mg/L would neither cause nor contribute to a violation of WQS in the immediate receiving water or in downstream Oklahoma waters, an explanation of how the 0.5 mg/L TP limit did not violate anti-backsliding requirements, and a detailed analysis of whether the 0.1 mg/L TP limit was technologically achievable at the Tier II projected 7.2 MGD design flow. The EPA also requested a detailed technical analysis of the projected net reduction in TP loadings at the NACA regional plant, including calculations showing the reduction in TP loadings projected to result from each existing

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<sup>1</sup> Federal regulations define *Draft permit* to mean “a document prepared under § 124.6 indicating the Director’s tentative decision to issue or deny, modify or revoke and reissue, terminate or reissue a ‘permit.’” *Proposed permit* is defined as “a State NPDES ‘permit’ prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for final review before final issuance by the State. A ‘proposed permit’ is not a ‘draft permit.’” 40 C.F.R. 122.2.

permitted discharger expected to connect to the NACA facility (and thus reduce or cease independent operation) and the expected timeframe for such reductions in loadings to be realized.

The EPA and the ADEQ subsequently engaged in telephone discussions regarding the EPA's concerns, including a conference call between the two agencies on June 30, 2021. On August 18, 2021, the ADEQ forwarded by email a draft response aimed at addressing the EPA's concerns. However, the EPA determined the draft response did not sufficiently address the EPA's concerns regarding the Tier II 0.5 mg/L TP limit or the backsliding issue. The EPA discussed its determination by telephone with the ADEQ and offered the EPA's assistance in finding a path forward. On September 21, 2021, the ADEQ forwarded by email draft revised permit language for EPA review that continued to include a 0.5 mg/L Tier II TP limit based on a theoretical presumption of TP reductions. The EPA notified the ADEQ via telephone that the revised permit language did not address the EPA's concerns.

On December 3, 2021, the ADEQ notified the EPA via email that the ADEQ had issued the NACA permit on December 1, 2021. The December 1, 2021, permit is fundamentally different from the draft permit reviewed by the EPA in October 2020. For instance, the Tier II limits in the December 1, 2021, permit now include a TP limit of 0.35 mg/L, with a phosphorus load of 21 lbs/day, as opposed to the Tier II TP limit in the draft permit of 0.5 mg/l, with a phosphorus load of 30 lbs/day. Part II of the permit has also been revised to require that the permittee provide a list of facilities signed up to connect to NACA with no phosphorus treatment or a limit greater than 0.35mg/L. The revised language in Part II indicates that the ADEQ now projects the NACA plant to result in an overall reduction in TP to the Illinois River Watershed of 6,575 lbs/year, as opposed to an estimate of overall reduction in TP of 7,800 lbs/year described by the ADEQ in its draft email response to the EPA's February 11, 2021, letter. Although the Tier II TP limits in the December 1, 2021, permit may appear on their face to be more stringent than the Tier II limits in the draft permit, in fact the changes only call into greater question the ADEQ's rationale and basis for these limits. The Tier II TP limits in the draft permit were described as water quality-based, while the December 1, 2021, permit describes them as technology-based. In addition, the ADEQ's explanation of why the permit complies with anti-backsliding requirements changed significantly. Despite the material differences in the December 1, 2021, permit and the draft permit reviewed by the EPA, the ADEQ did not submit the December 1, 2021, permit to the EPA for review prior to issuance.

In addition, significant public comment was submitted to the ADEQ regarding the draft NACA permit by the Oklahoma Conservation Commission (OCC) and the OWRB. The State of Oklahoma is downstream of Arkansas in the Illinois River Basin and its waters are thus affected by the ADEQ's issuance of the NACA permit. By letter dated January 19, 2021, the OCC noted Arkansas and Oklahoma's shared commitment to protect the Illinois River Basin and the importance of updating permits on both sides of the border in furtherance of that goal. However, the OCC stated that it had significant concerns with the draft permit, foremost of which was its opposition to the increase in the TP effluent limit from 0.1 to 0.5 mg/L. The OCC stated that it could not support this increase in the TP limit, as it would allow an increase the allowable TP load by a factor of 10 in a basin that already consistently fails to meet water quality standards at the state line. The OCC also stated that it did not accept ADEQ's argument that the increase in TP loading would be offset by regionalization, arguing instead that the NACA plant has always been intended to be a regional plant, that regionalization was always intended at the 0.1 mg/L TP limit, and that ADEQ's vision of additional cities tying into the plant in the future, thereby decreasing the pollutant load, was based on conjecture. The OCC also argued that the draft permit was not in compliance with federal anti-backsliding requirements.



The OWRB also submitted comments opposing the increase in the TP effluent limit from 0.1 mg/L to 0.5 mg/L, noting that ambient water quality monitoring results from state line locations in both Arkansas and Oklahoma demonstrate that Oklahoma's total phosphorus water quality standard (WQS) is consistently violated as the Illinois River flows from Arkansas into Oklahoma, and that increasing the allowable phosphorus load in the watershed from the NACA plant is inconsistent with watershed wide efforts to reduce phosphorus loading and meet applicable Oklahoma WQS as required by the CWA. The OWRB also commented on the speculative nature of ADEQ's argument that additional small communities would in the future connect to the NACA regional wastewater treatment plant, in addition to arguing that the increased TP limit violated anti-backsliding requirements. The OWRB recommended that the draft permit be revised to reflect a TP effluent limit of 0.1 mg/L as a 6-month average at outfall 001 under Tier II of the permit.

Because the NACA permit prepared by the ADEQ following the receipt of public comments (i.e., the proposed permit) differed from the draft permit reviewed by the EPA, and because the ADEQ received significant public comment on the draft permit, the ADEQ was required pursuant to 40 C.F.R.123.44(j) and Section III.B.11 of the MOA to resubmit the proposed permit to the EPA for review. The ADEQ did not do so, but instead issued a final permit on December 1, 2021.

Because the ADEQ did not provide the EPA with the proposed NACA permit for review prior to issuance of the final permit as required by the NPDES regulations and the MOA, the December 1, 2021, permit is not a validly issued final NPDES permit. Instead, the December 1, 2021, permit is a proposed permit as defined under 40 C.F.R. 122.2. The EPA's determination that the December 1, 2021, permit is a proposed permit subject to EPA review, rather than a validly issued final NPDES permit, is supported by case law. See Champion International Corp. v. U.S. E.P.A., 850 F.2d 182 (4th Cir., 1988). See also In the Matter of: J&L Specialty Products Corp. Permit No. OH 0007188, 5 E.A.D. 31 (EAB 1994).

## **II. The EPA generally objects to issuance of the NACA permit pursuant to Section 402(d) of the CWA, federal regulations at 40 C.F.R. 123.44, and Section III.B. of the MOA.**

Based on our review of the December 1, 2021, proposed NACA permit, which was received by the EPA on December 3, 2021, the EPA generally objects to the issuance of this permit based in general terms on the following:

- The procedures followed in connection with formulation of the proposed permit failed in a material respect to comply with the procedures required by the CWA, 40 C.F.R. Part 123 and the MOA. The ADEQ did not provide Oklahoma, a downstream state whose waters are affected by issuance of the NACA permit, and the EPA written notification of its failure to accept Oklahoma's written recommendations with respect to the NACA permit and its reasons for doing so as required by CWA Section 402(b)(5). See also MOA Section III.B.13. In addition, the ADEQ did not forward to the EPA the significant comments objecting to the draft permit and received in writing during the public comment period as required by Section III.B.13 of the MOA.
- The written recommendations from the State of Oklahoma regarding the NACA permit were not accepted by the ADEQ and the EPA finds the reasons for rejecting the recommendations

inadequate. As described above, during the public comment period for the draft permit, the OWRB and the OCC expressed significant concerns about the draft permit's 0.5 mg/L TP limit and recommended that draft permit be revised to reflect a TP effluent limit of 0.1 mg/L as a 6-month average at outfall 001 under Tier II of the permit. The ADEQ did not accept Oklahoma's recommendations, and the EPA has determined the ADEQ's reason for rejecting the recommendations to be inadequate.

- The increase in TP effluent limits in the proposed permit violates the anti-backsliding provisions at CWA 402(0) and 40 C.F.R. 122.44(l).
- The Tier II TP effluent limit in the proposed permit fails to satisfy the requirements of the CWA and implementing regulations, including 40 C.F.R. 122.44 (d). The ADEQ has failed to demonstrate this limit is sufficient to protect all applicable WQS, including those of the downstream State of Oklahoma. The ADEQ states that the 0.35 mg/L Tier II TP limit in the permit is technology-based.
- The Tier II TP permit limit is not consistent with the ADEQ's approved Water Quality Management Plan.

As noted above, this objection letter describes the general nature of the EPA's objections in accordance with 40 C.F.R. 123.44(b)(1) and Section III.B.11 of the MOA. As required by 40 C.F.R. 123.44(b)(2) and MOA Section III.B.11, the EPA will follow this general objection with a specific objection setting forth in greater detail the reasons for the objection, including the section of the CWA or regulations supporting the objection, and the actions that must be taken by the ADEQ to eliminate the objection. In accordance with 40 C.F.R. 123.44(a)(1), the EPA has forwarded a copy of this general objection letter to the permit applicant.

Thank you for your attention to this matter. If you have any questions or concerns, please feel free to contact me at 214-665-8138.

Sincerely,

*Charles Maguire*

Charles W. Maguire  
Director  
Water Division (6WD)

Cc: (electronic) Mr. Michael G. Neil, Facility Manager, NACA  
Mr. George R. Spence, Board Chair, NACA  
Ms. Becky Keogh, Cabinet Secretary, Arkansas Energy & Environment;  
Director, Arkansas Department of Environmental Quality  
Ms. Julie Linck, Administrator, Arkansas Energy & Environment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270

January 21, 2022

Alan York  
Associate Director  
Office of Water Quality Division  
Division of Environmental Quality  
Arkansas Department of Energy and Environment  
5301 North Shore Drive North Little Rock, AR 72118-5317

Re: Specific Objection to Proposed NPDES Permit for  
Northwest Arkansas Conservation Authority  
NPDES Permit No. AR0050024

Dear Mr. York:

In accordance with Section 402(d) of the Clean Water Act (CWA), federal regulations at 40 C.F.R. 123.44(b), and Section III.B of the Memorandum of Agreement signed between the EPA and the Arkansas Pollution Control and Ecology Commission upon approval of the State of Arkansas to implement the National Pollutant Discharge Elimination System (NPDES) program ("the MOA"), the U.S. Environmental Protection Agency (EPA) is hereby specifically objecting to the Division of Environmental Quality's (DEQ's, formally the Arkansas Department of Environmental Quality or ADEQ) issuance of Permit Number AR0050024 to Northwest Arkansas Conservation Authority (NACA) (hereinafter the "proposed permit").

This specific objection follows the EPA's letter to the DEQ dated December 30, 2021, notifying the DEQ of the EPA's determination that the December 1, 2021, NACA permit is a proposed permit subject to EPA review and of the EPA's general objection to the NACA permit ("General Objection Letter," attached and incorporated herein). As required by 40 C.F.R. 123.44(b)(2) and Section III.B.11 of the MOA, this specific objection describes in greater detail the reasons for the objection, including the Sections of the CWA or regulations supporting the objection, and the actions that must be taken by the DEQ to eliminate the objection. Within 90 days of receipt of the EPA's specific objection, the State or any interested person may request a public hearing on the objection. If no public hearing is held and the DEQ does not resubmit a permit that addresses the EPA's objections within 90 days of receipt of this objection, exclusive authority to issue the permit will pass to the EPA. See 40 C.F.R. 123.44(e), (f), (g), and (h) and MOA Sections III.B.11 and 12.

Based on our review of the December 1, 2021, proposed NACA permit, which EPA received on December 3, 2021, and in accordance with 40 C.F.R. 122.44(c), the EPA specifically objects to the issuance of this permit on the following grounds:

**Item 1. The procedures followed in connection with formation of the proposed permit failed in a material respect to comply with procedures required by the CWA, regulations, and MOA (40 C.F.R. 123.44(c)(3)).**

During the public comment period for the draft NACA permit, the Oklahoma Water Resources Board (OWRB) and the Oklahoma Conservation Commission (OCC) submitted written comments opposing the draft permit's 0.5 mg/L total phosphorous (TP) limit at Outfall 001 under Tier II (7.2 MGD design flow) and recommending that the draft permit be revised to reflect a Tier II TP effluent limit of 0.1 mg/L as a 6-month average at Outfall 001. Both Oklahoma agencies expressed significant concern that the increased TP concentration combined with the expanded facility flow would result in a ten-fold increase in phosphorus load to the Illinois River watershed in a basin that already consistently fails to meet water quality standards at the Arkansas/Oklahoma state line.

The DEQ did not forward to the EPA the significant comments objecting to the draft permit received in writing during the public comment period as required by Section III.B.13 of the MOA. In addition, both 40 C.F.R. 123.44(j) and the MOA required the DEQ to forward the proposed NACA permit to the EPA for review because the proposed permit differed from the draft permit that was previously reviewed by the EPA and because the DEQ had received significant public comment on the draft permit. (See detailed discussion in Section I of the EPA's December 30, 2021, General Objection Letter). The DEQ failed to comply with these regulatory and MOA requirements, which would have provided the EPA an opportunity to review the proposed NACA permit before it was issued on December 1, 2021.

**Item 2. The effluent limits of the permit fail to satisfy the requirements of 40 C.F.R. 122.44(d) (40 C.F.R. 123.44(c)(8)).**

40 C.F.R. 122.44(d) requires permits to include, in pertinent part, requirements as necessary to:

- Achieve water quality standards established under Section 303 of the CWA, including state narrative criteria for water quality (40 C.F.R. 122.44(d)(1))

The DEQ has failed to demonstrate that the 0.35 mg/L effluent limit for TP in the December 1, 2021, proposed permit will achieve or maintain either Arkansas's narrative nutrient WQS or the 0.037 TP water quality criterion of the downstream State of Oklahoma, as required by 40 C.F.R. 122.44(d)(1). The permit fact sheet states that the Tier I (3.6 MGD design flow) limit for TP at Outfall 001 is a technology-based limit justified by the previous permit and EPA's April 3, 2009, objection letter, and that the Tier II (7.2 MGD design flow) TP limit is a technology-based limit justified by the 2018 Memorandum of Agreement between the States of Arkansas and Oklahoma and the DEQ's "calculated offset based on the amount of phosphorus injected into the subsurface." See Part 12.A of the Fact Sheet, Chart titled 'Justification for Limitations and Conditions of the Final Permit'<sup>1</sup>

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<sup>1</sup> Although the DEQ states that the 0.35 mg/L Tier II TP limit is a technology-based limit based on an offset of TP loading to the watershed, the EPA's Trading Policy does not support trading to meet technology-based effluent limits. "The intent of a TBEL is to require a minimum of performance level for point sources based on currently available treatment technologies. EPA expects all dischargers within a particular industrial category to achieve the defined basic level of pollutant control and does not support the use of water quality trading to meet technology standards." Water Quality Trading Toolkit for Permit Writers (EPA, 2007, Updated 2009, p. 27)

There is nothing in the permit record to support the DEQ's assertion that the TP limits in the proposed permit are technology-based. The 0.1 mg/L (as a 30-day average) TP effluent limit contained in NACA's 2012 permit (which expired in 2017 and is administratively continued under 40 C.F.R. 122.6) is a water quality-based effluent limit established under 40 C.F.R. 122.44(d) as a translation of Arkansas' narrative water quality criterion and based on the EPA's 304(a) Gold Book recommended criterion. See 40 CFR 122.44(d)(1)(vi)(B).<sup>2</sup> Regardless, the DEQ has not demonstrated that the 0.35 mg/L Tier II TP limit will be sufficient to achieve compliance with all applicable WQS, including any narrative criteria for water quality, as required by 40 C.F.R. 122.44(d). The 2018 MOA between the States of Arkansas and Oklahoma neither supersedes nor nullifies the requirements of the CWA or federal regulations.

In the permit fact sheet, the DEQ justifies the 0.35 mg/L Tier II TP limit at Outfall 001 based on the regional nature of the NACA facility and the anticipated offsets in phosphorus loading to be realized by current and future connections to the facility. According to the fact sheet, the facility currently serves Bentonville, Elm Springs and Tontitown, with plans to serve other communities in the future, including Cave Springs and Highfill. The fact sheet states that, using Cave Springs as a model, the DEQ calculated the appropriate TP offset credit by subtracting the phosphorus that could be removed by plant uptake from the total amount of phosphorus that is injected subsurface each year, and then applying a trading ratio of 1:1.5 to the remaining phosphorus not available for plant uptake that is injected into the subsurface each year. The calculation sheet included in the fact sheet (and based on Cave Springs) shows an allowable TP credit of approximately 6,712 lbs per year, supporting a Tier II TP effluent limit for NACA of 0.35 mg/L.

The EPA finds several problems with the DEQ's calculated TP offset. For example, the TP offset proposed between NACA and Cave Springs involves an offset between a point source discharger and a no-discharge facility. The DEQ proposes to allow NACA to meet TP WQS by reducing or eliminating the discharge of TP from Cave Springs through the diversion of Cave Springs' wastewater flow to NACA. However, the DEQ currently permits Cave Springs as a no-discharge facility because Cave Springs' existing wastewater treatment system does not discharge its effluent to surface waters. Instead, Cave Springs' treated wastewater effluent, including its TP load, is disposed of through sub-surface discharges via low-pressure drip zones at a rate calculated to prevent the effluent from reaching Osage Creek, approximately three miles from Cave Springs' sub-surface application site. There is nothing in the permit record to substantiate the presumption in the DEQ's calculations that over ninety percent of the TP load in these permitted no-discharge sub-surface flows is reaching Osage Creek.

In addition, information provided in the permit fact sheet regarding the DEQ's TP offset calculations is inconsistent with data contained in an engineering report provided to the EPA in conjunction with Cave Springs' application for federal assistance (SF-424) on January 22, 2019, in which diversion of wastewater flow to NACA was discussed and identified as the most cost-effective option ("the McClelland Report").<sup>3</sup> The nutrient trading offset calculations provided by

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<sup>2</sup> Where a state has not established a water quality criterion for a specific pollutant, 40 CFR 122.44(d)(1)(vi)(B) provides the permitting authority with authority to establish effluent limits on a case-by-case basis, using EPA's water quality criteria, published under section 304(a) of the CWA, supplemented where necessary by other relevant information.

<sup>3</sup> Preliminary Engineer Report Wastewater Treatment and Disposal, City of Cave Springs, Arkansas. McClelland Consulting Engineers, Inc. January 2019.

the DEQ in the permit fact sheet are based on a flow rate of 0.49 MGD and a TP concentration of 7.35 mg/L. However, after describing how Cave Springs' treated effluent is currently disposed of via low pressure drip zones (leech fields), Section 2.5 of the McClelland Report indicates the average inflow to the leech fields from 2017-2018 was 0.067697 MGD, not the 0.49 MGD value provided in the fact sheet. The EPA has determined that by calculating the TP offset using the 0.49 MGD flow rate instead of the 0.067697 MGD flow rate, the DEQ has inadvertently overestimated the available trading offset by a factor of seven<sup>4</sup>. Based on the above analysis, the EPA cannot conclude that the DEQ's proposed TP offset is based on scientifically defensible pollutant reductions in accordance with the EPA's Water Quality Trading Policy. See Water Quality Trading Policy (EPA 2003) and "Updating the Environmental Protection Agency's (EPA) Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality." (EPA Memorandum dated February 6, 2019).

The proposed permit allows a ten-fold increase in total phosphorus loading (mass) to be discharged from the NACA facility. While the EPA recognizes the potential benefit of shifting phosphorus removal from one or more less efficient wastewater plants to a more efficient regional wastewater plant, a demonstration is still needed that the proposed 0.35 mg/L Tier II TP effluent limit for NACA is, in fact, sufficient to ensure compliance with Arkansas's narrative water quality criterion, as well as the 0.037 TP water quality criterion of the downstream State of Oklahoma. Based on our review of the proposed 0.35 mg/L Tier II limit for TP and the justification for the limit provided by the DEQ, the EPA cannot conclude that the proposed Tier II TP limit is sufficient to do so.

**Item 3. The permit fails to apply, or to ensure compliance with, any applicable requirement of this part (40 C.F.R. 123.44(c)(1)), and issuance of the proposed permit would in any other respect be outside the requirements of CWA, or regulations issued under CWA (40 C.F.R. 123.44(c)(7)).**

The 0.35 mg/L Tier II TP limit in the proposed permit violates the anti-backsliding provisions at CWA Section 402(o) and 40 C.F.R. 122.44(l). CWA section 402(o) and 40 CFR 122.44(l) state that a permit may not be renewed, reissued, or modified to contain effluent limits that are less stringent than the effluent limits in the previous permit, with limited exceptions. In the permit fact sheet and in the Response to Comments document accompanying the proposed permit, the DEQ argues that because the region served by NACA has experienced significant growth and the facility must expand to provide wastewater treatment services for these communities, the NACA proposed permit falls under the anti-backsliding exception found at CWA Section 402(o)(2)(A), providing for a less stringent effluent limit if material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limit. The permit record does not describe why an increased design flow justifies a less stringent effluent limit. Based on the original permit application submitted by NACA, the facility was always intended to be a regional facility. The original permit was written with the understanding that construction was not complete and that even though the original permit contained a design flow of 3.6 MGD, the long-term plan for the facility was to reach a design flow as high as 80 MGD. Thus, the current proposal to increase NACA's design flow from 3.6 MGD to 7.2 MGD does not in itself justify the application of a less stringent TP

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<sup>4</sup> It is also important to note that the EPA's Water Quality Trading Policy calls for trades to be made on current credits, not future credits.

concentration effluent limit, particularly in light of NACA's demonstrated ability to comply with the 0.1 mg/L TP permit limit.

Regardless of the anti-backsliding exemption's applicability, Section 402(o)(3) of the CWA states that in no event may a permit be renewed, reissued, or modified to contain a less stringent effluent limit if the implementation of such limitation would result in a violation of a water quality standard under section 303 of the Act. The EPA has concluded the proposed 0.35 mg/L Tier II TP limit is not sufficient to meet Arkansas's narrative nutrient WQS or Oklahoma's 0.037 mg/L criterion for TP at the border, as discussed above.

In the fact sheet for the proposed permit, the DEQ also argues that the 0.35 mg/L Tier II TP limit in the proposed permit does not violate CWA Section 402(o) or 40 C.F.R. 122.44(l) because it is not a revised effluent limit under CWA Section 303(d)(4)(A). Because the proposed permit requires an offset that reduces phosphorus loading from currently operating treatment systems that have little to no phosphorus treatment, the DEQ argues that the Tier II TP limit requires the same level of pollutant reduction as the previous 0.1 mg/L TP limit. According to the fact sheet, the 0.35 mg/L Tier II TP should not be considered a change because it is functionally equivalent to the 0.1 mg/L TP limit. The DEQ also argues that it evaluated the *potential* impact of the 0.35 mg/L Tier II TP limit at the state line, and that when the DEQ's calculations account for the reduction in phosphorus in the watershed required by the proposed permit, a reduction in phosphorus loading occurs. The fact sheet argues that without a clear demonstration that the Tier II limits on phosphorus would cause a measurable increase in phosphorus concentration at the state line, those Tier II TP limits are not revised effluent limits under CWA Section 303(d)(4)(A). The EPA disagrees with the argument that the 0.35 Tier II TP limit is the functional equivalent of the 0.1 mg/L TP limit based on the EPA's concerns with the DEQ's proposed TP offset as discussed in Item 2 above.

In the fact sheet, the DEQ also appears to argue that, in the alternative, the anti-backsliding provisions of the CWA do not apply because the 0.1 mg/L TP limit is not a water quality-based limit under the CWA. The fact sheet states that because neither the DEQ nor the EPA conducted a rulemaking to establish the 0.1 mg/L TP limit as a water quality based effluent limit, the DEQ does not have a basis in state or federal law to impose the 0.1 mg/L limit as a water quality-based limit. The EPA disagrees. As noted above, the 0.1 mg/L TP water quality-based effluent limit in NACA's 2012 permit was established under 40 C.F.R. 122.44(d)(1)(vi)(B) as a numeric translation of Arkansas' narrative water quality criterion. The regulation does not require a rulemaking to establish a water quality-based effluent limit based on a narrative water quality criterion. Further, even if the 0.1 mg/L TP effluent limit were not water quality-based, the anti-backsliding provisions of the CWA and federal regulations would still apply. CWA Section 402(o) also applies to best professional judgment (BPJ) based limits and the regulatory anti-backsliding prohibition at 40 C.F.R. 122.44(l) applies broadly to "effluent limitations, standards, or conditions."

In addition to violating the anti-backsliding provisions of the CWA and federal regulations, the 0.35 mg/L Tier II TP effluent limit in the proposed permit fails to satisfy the requirements of 40 C.F.R. 122.4(d) because the permit fails to ensure compliance with the water quality standard of the downstream State of Oklahoma, as discussed in Item 2 above.

To eliminate the EPA's specific objections to the proposed permit, the DEQ must revise the 0.35 mg/L Tier II TP limit in the proposed permit to reflect a 0.1 mg/L Tier II TP limit (as a 30-day average) at Outfall 001.

In closing, the Illinois River watershed is an important resource for a diverse range of stakeholders, both public and private. Notably, the watershed holds significant cultural and natural resource importance to the Cherokee Nation, whose reservation is downstream of the discharge. By not ensuring the protection of the watershed's designated uses, the potential is increased for negative impacts to the Tribal Nation, as well as other communities with environmental justice concerns.

Thank you for your attention to this matter. If you have any questions or concerns, please feel free to contact me at 214-665-8138.

Sincerely,

A handwritten signature in black ink, appearing to read 'Charles W. Maguire', with a stylized flourish at the end.

Charles W. Maguire  
Director  
Water Division (6WD)

cc: (electronic)

Mr. Michael G. Neil, Facility Manager, NACA  
Mr. George R. Spence, Board Chair, NACA  
Ms. Becky Keogh, Cabinet Secretary, Arkansas Energy & Environment  
Director, Arkansas Department of Environment



# EXHIBIT C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270

April 1, 2022

Alan York  
Associate Director  
Office of Water Quality  
Division of Environmental Quality  
Arkansas Department of Energy and Environment  
5301 North Shore Drive North Little Rock, AR 72118-5317

Re: EPA Specific Objections to  
Proposed NPDES Permits for  
Northwest Arkansas Conservation Authority  
NPDES Permit No. AR0050024, and  
Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities  
NPDES Permit No. AR0022063

Dear Mr. York:

On a March 16, 2022, conference call between attorneys for Arkansas' Department of Environmental Quality (DEQ), Northwest Arkansas Conservation Authority (NACA), Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities (Springdale) and the U.S. Environmental Protection Agency (EPA) regarding the EPA's Specific Objection letters for the NACA and Springdale proposed permits, the attorneys for the DEQ and the facilities raised several concerns regarding what they believed were errors in fact or law contained in the EPA's objection letters. The EPA has carefully considered the concerns raised on the call, some of which were reiterated in a written list of concerns submitted by the DEQ to the EPA on March 18, 2022, via email. Although the EPA's position as stated in the Specific Objection letters, i.e., that both proposed permits must be revised to contain effluent limits for total phosphorus (TP) sufficient to meet all applicable water quality standards (WQS), has not changed, we would like to offer the following additional clarification to address some of the concerns raised.

**1) The EPA's determination that a 0.1 mg/L TP effluent limit is appropriate for the NACA and Springdale permits is site-specific to the NACA and Springdale permits.**

One concern expressed on the call centered around the following language in the NACA and Springdale Specific Objection letters, respectively, and whether, through this language the EPA was establishing a state-wide water quality-based effluent limit for TP:

To eliminate the EPA's specific objections to the proposed permit, the DEQ must revise the 0.35 mg/L Tier II TP limit (as a 30-day average) at Outfall 001. (January 21, 2022, Specific Objection letter re NACA); and

To eliminate the EPA's specific objections to the proposed permit, the DEQ must revise the 1.0 mg/L TP limit in the proposed permit to reflect a 0.1 mg/L TP limit (as a 30-day average) at Outfall 001. (February 10, 2022, Specific Objection letter re Springdale).

Per section 402(d)(2) of the CWA and 40 C.F.R. 123.44(b)(2)(ii), the EPA is required to include in its objection “the actions that must be taken by the State Director to eliminate the objection (including the effluent limitations and conditions which the permit would include if it were issued by the Regional Administrator).”

As explained in our Specific Objection letters, the proposed permits for NACA and Springdale must be revised to contain effluent limits for TP sufficient to meet all applicable WQS, including the Arkansas narrative criterion for nutrients found at Arkansas Pollution Control and Ecology Commission (APC&EC) Rule 2.509, as well as the downstream State of Oklahoma’s numeric 0.037 mg/L TP criterion found at Section 785:45-5-19 of the Oklahoma Administrative Code. The EPA’s regulations provide that where a state has not established a numeric criterion for a pollutant that has reasonable potential to cause a violation of applicable narrative criteria, the permitting authority must establish effluent limits using the specified options. One of these options is to establish effluent limits on a case-by-case basis, using the EPA’s water quality criteria published under CWA Section 304(a), supplemented where necessary by other relevant information. 40 CFR Part 122.44(d)(1)(vi)(B). Using this option, the EPA relied on the EPA’s 304(a) Gold Book recommended criterion in conjunction with other relevant information, including site-specific information, to determine that a 0.1 mg/L TP effluent limit (30-day average) is appropriate for the NACA and Springdale permits to ensure that TP discharges from these two facilities meet the applicable water quality criteria. A TP effluent limit of 0.1 mg/L TP (as a 30-day average) is the effluent limitation that the permits for these two facilities would include if the EPA were to issue the permits. The language quoted above, reflecting the EPA’s determination that 0.1 mg/L TP (as a 30-day average) effluent limit is appropriate for the NACA and Springdale permits, was not intended to suggest that the 0.1 mg/L TP (as a 30-day average) effluent limit automatically applies to all National Pollutant Discharge Elimination System (NPDES) permits state-wide. Instead, each NPDES permit issued by the State or the EPA must be evaluated on a case-by-case basis to ensure that all proposed effluent limits, including those for TP, will be protective of applicable WQS.

**2) The EPA’s use of a 30-day average is not based on any legal prohibition regarding the use of a 6-month rolling average.**

One of the attorneys on the March 16, 2022, call asked for the legal basis for the EPA’s rejection of the ADEQ’s use of a 6-month rolling average for the 0.35 mg/L Tier II TP effluent limit in the proposed NACA permit. To my knowledge, there is no statutory or regulatory prohibition on the use of a 6-month rolling average. The EPA determined that a 0.1 mg/L TP limit as a 30-day average is the appropriate effluent limit for the NACA permit to protect the applicable water quality criteria.

**3) The rule language referenced by the DEQ does not limit the EPA’s obligation to include permit limits necessary to protect the applicable narrative water quality criterion for nutrients.**

The DEQ expressed concern that the EPA ignored language in APC&CE Rule 2.509 addressing effluent limits for dischargers in the nutrient surplus areas, arguing that the narrative standard is only one part of the rule. In accordance with 40 CFR 122.44(d)(1)(vi)(B), the EPA relied on the EPA’s 304(a) Gold Book recommended criterion in conjunction with other relevant information, including site-specific information, to determine that a 0.1 mg/L TP effluent limit (30-day average) would be sufficient to meet Arkansas’ narrative nutrient water quality criterion and the 0.37 mg/L numeric TP water quality criterion of the downstream State of Oklahoma. The 0.1 mg/L TP limit is a water-quality based effluent limit calculated to ensure the protection of applicable WQS. The additional language in APC&EC Rule 2.509 (B) referenced by the DEQ sets out maximum TP discharge limits to be included in permits for

point source dischargers to certain waterbodies based on the facilities' design flow. There is nothing in the record to indicate that these numbers have been determined to be protective of water quality. Rather, the fact that the numbers are based on design flow indicates that the numbers are technology-based, not water-quality based. Accordingly, the EPA did not consider the Rule 2.509 (B) language referenced by the DEQ in the EPA's analysis of the appropriate water quality-based TP effluent limits for the NACA and Springdale permits. Further, even if the language cited by the DEQ did apply to the determination of appropriate water quality-based effluent limits for these permits, the EPA does not read the language to limit the EPA's discretion to require lower water quality-based TP limits. The language cited by the DEQ provides that phosphorus limits in certain permits be "no greater" than the limits listed, thus creating a ceiling on the amount of phosphorus that may be added to these waterbodies. There is nothing in the language prohibiting the inclusion of lower TP permit limits if necessary to meet WQS, and in fact there is specific language pointing to the option to include lower TP limits under certain circumstances.

**4) The EPA supports offsets. The concerns detailed by the EPA in the NACA Specific Objection letter are related to the specifics of the DEQ's TP offset calculations for the NACA proposed permit.**

Attorneys for the DEQ and NACA raised several concerns related to the EPA's stated inability to accept the DEQ's calculated TP offset as the basis for the 0.35 mg/L Tier II TP limit in the NACA proposed permit. In response, I would first like to clarify what appeared to be confusion regarding the basis for the EPA's inability to accept the DEQ's calculated offset. The EPA is in no way saying that offsets are not allowed, that offsets are not allowed for regional facilities, or that point source to non-point source trading is not allowed. To the contrary, the EPA encourages water quality trading and is willing to consider offsets in determining appropriate NPDES permit effluent limitations. However, to be acceptable, an offset must be based on scientifically defensible pollutant reductions in accordance with the EPA's Water Quality Trading Policy. The EPA was not able to determine, based on the information before us, that the specific TP offset proposed by the DEQ for the NACA permit meets those requirements.

The EPA details its concerns with the DEQ's calculated TP offset in the NACA Specific Objection letter. These concerns center around an absence of information in the record to substantiate the DEQ's presumptions regarding the TP load to the Illinois River that will be eliminated by diversion of the Cave Springs wastewater discharge to the NACA facility. As discussed in the NACA Specific Objection letter, Cave Springs' DEQ-issued no-discharge permit prohibits Cave Springs from discharging wastewater to surface waters. Instead, the facility is permitted to dispose of its treated wastewater effluent through drip irrigation at a flow rate calculated to prevent the effluent from reaching Osage Creek. If Cave Creek is complying with its permit, there should be no TP load to offset. Yet, the DEQ presumes in its TP offset calculations that over ninety percent of the TP load from Cave Springs' sub-surface flows is reaching Osage Creek. Despite previous requests from the EPA, the DEQ has provided the EPA with no data to support this claim.

The DEQ and attorneys for NACA argue that despite Cave Springs being permitted as a no-discharge facility, the reality is that Cave Springs' wastewater is reaching Osage Creek in large amounts. To bolster this argument, they point to what they believe are inaccuracies in the EPA's record, for example, that Osage Creek is in the middle of the drip field for Cave Springs, not approximately 3 miles from the sub-surface application site as stated by the EPA, and that the EPA's estimate of flow rate contribution is outdated. The EPA obtained the information referenced in its Specific Objection letter from a 2019

report from McClelland Consulting Engineers, Inc. entitled "Preliminary Engineer Wastewater Treatment and Disposal, City of Cave Springs, Arkansas." The EPA staff obtained this report independently in an effort to add specific data to its analysis of the DEQ's TP offset calculations because the DEQ has not provided the EPA with any underlying data to support the numbers included in the State's calculations, despite previous requests from the EPA for these data. If the DEQ believes the data contained in this report are inaccurate or outdated, the EPA encourages the DEQ to submit what it believes to be the accurate or updated data. Examples of the types of data the EPA would need to see in support of the DEQ's offset calculations, none of which is in the record before the EPA, include, at a minimum:

- Current monitoring data for Osage Creek and Cave Springs' drip fields indicating the amount of wastewater discharging from the drip fields to Osage Creek;
- The current application rate of Cave Springs' treated wastewater effluent to the drip fields. Is Cave Springs applying wastewater above the agronomic rate?

The EPA would be happy to review and discuss any additional data once it is received. Finally, it was stated on the March 16<sup>th</sup> call that the Oklahoma Conservation Commission (OCC) had not provided comments on the Springdale draft permit as stated by the EPA in the Springdale Specific Objection letter. In response, I'm enclosing a copy of a March 16, 2021, letter from the OCC to the DEQ regarding the DEQ's draft permit for Springdale, which contains the comments referred to by the EPA in the Springdale Specific Objection letter.

I hope this additional clarification is helpful. I look forward to your response to our Specific Objection letters. Please feel free to contact me if you have any further questions or wish to discuss options for a path forward.

Sincerely,

*Charles Maguire*

Charles W. Maguire  
Director  
Water Division (6WD)

Enclosure

cc: (electronic)

Mr. Michael G. Neil, Facility Manager, NACA

Mr. George R. Spence, Board Chair, NACA

Mr. Heath Ward, Executive Director, Springdale Water Utilities

Ms. Becky Keogh, Cabinet Secretary, Arkansas Energy & Environment,  
Director, Arkansas Department of Environmental Quality

Ms. Julie Linck, Administrator, Arkansas Energy & Environment

Mr. Basil Hicks, Office of Chief Counsel, Arkansas Energy & Environment

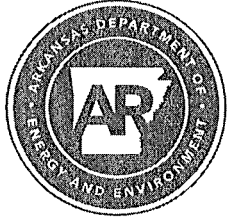
Mr. Mitchell Dowden, Office of Chief Counsel, Arkansas Energy & Environment

Ms. Susan Bodine, Earth & Water Law LLC

Ms. Mary Ellen Ternes, Earth & Water Law LLC

Mr. Allan Gates, Mitchell, Williams, Selig, Gates & Woodyard

Mr. Jordan Wimpy, Mitchell, Williams, Selig, Gates & Woodyard



# ARKANSAS

## ENERGY & ENVIRONMENT

Mr. Charles Maguire, Director  
Region 6 Water Division  
U.S. Environmental Protection Agency  
1201 Elm Street, Suite 500  
Dallas, TX 75270

**RE: Northwest Arkansas Conservation Authority (NACA) – Regional Wastewater Treatment Facility, NPDES Permit Number AR0050024, and Springdale Water and Sewer Commission, Springdale Wastewater Treatment Facilities, NPDES Permit No. AR0022063**

Dear Mr. Maguire,

I am in receipt of your letter of April 01, 2022, regarding the U.S. Environmental Protection Agency's (EPA) specific objection letters for the Northwest Arkansas Conservation Authority (NACA) and Springdale Wastewater Treatment Facilities (Springdale) permits issued by this office on December 1, 2021.

Please consider this correspondence a consolidated response to the Specific Objections previously filed on the above-referenced permits and your supplemental explanation of those objections in your April 01, 2022 letter.

DEQ considers EPA's objections untimely and an attempt by EPA to act beyond its statutory authority. However, DEQ reserves its right to request hearings under §402(d) of the Clean Water Act (CWA) for the objections made by EPA on both the NACA and Springdale permits referenced above. As I am sure you are aware, the CWA requires EPA to hold a hearing if DEQ requests it.

**A. The NACA and Springdale effluent limits are appropriately based on coordinated state policy and promulgated state regulations**

The relationship between nutrients and its potentially harmful effects on water quality is complicated and both evaluating and addressing nutrients concerns in a waterbody often requires a true, science-driven, site-specific approach. See e.g., Florida Department of Environmental Protection's Numeric Nutrient Criteria Development: <https://floridadep.gov/dear/water-quality-standards/content/numeric-nutrient-criteria-development>. EPA's Ambient Water Quality Criteria for Nutrient Pollution in Lakes and Reservoirs, which established a stressor-response model to evaluate the complex interactions between nutrients and aquatic resources in lakes and reservoirs, highlights the complexities inherent in developing numeric nutrient limits. EPA's website further explains that the tools in its new criteria "provide flexibility for each state to incorporate their own

risk management decisions in deriving final criteria.” There is no one-size fits all solution that all states must adopt to address excess nutrients in their waters.

1. Arkansas is working to reduce nutrients with Oklahoma’s cooperation

Arkansas and Oklahoma have a long history of disputes, lawsuits, and more recently negotiation and cooperative effort to improve water quality and reduce nutrient inputs into the Illinois River Watershed. Each state received EPA-approval and has been administering and enforcing its own NPDES permit programs for decades. Each state has significant expertise in local resources within their jurisdictions, including the Illinois River Watershed. In 2018, Arkansas and Oklahoma developed and executed a Memorandum of Agreement (MOA) (See Exhibit 1), which memorializes the states’ common goal of “further improving and protecting water quality in the Illinois River Watershed, particularly the portions designated as Oklahoma Scenic Rivers and Lake Tenkiller.”

Through the MOA, the states agreed to certain implementation obligations that reflected recommendations from the Joint Study Committee, commissioned by the states to better understand what phosphorus levels and what frequency and duration components of measure are necessary to overall health of the resource, including its beneficial uses and Outstanding Resource Water designation. These commitments include certain steps that each state will take when renewing, amending or modifying existing NPDES permits, like the NACA and Springdale permits. The MOA is not a binding state regulation, but it is a cooperative nutrient reduction strategy that reflects significant investment and well-considered policy choices that all inure to the benefit of the Illinois River Watershed. Although DEQ considers the MOA to be a path forward to improving water quality in the Illinois River Watershed and relies on it when reissuing NPDES permits, EPA did not consider it when evaluating the NACA or Springdale permits or when purporting to establish “site-specific” limits for these facilities, both of which discharge into the Illinois River Watershed.

Arkansas and Oklahoma recognize that nutrients present a complicated issue. Arkansas and Oklahoma also recognize that further nutrient reduction in the Illinois River Watershed is a long-term endeavor. Legacy nutrient issues will continue to impact the Illinois River Watershed and the MOA includes multiple cooperative efforts to reduce nutrients in the watershed in both states, including holistic efforts that focus on more than just reductions from point source dischargers, such as NACA and Springdale. Both states also recognize that cooperative watershed-based solutions can provide better outcomes.

In the MOA, Arkansas and Oklahoma agreed to a timetable for implementing more stringent phosphorus limits for discharges into the Illinois River Watershed. Both states also agreed to form a Steering Committee to oversee the implementation of the MOA. Arkansas and Oklahoma are actively working on models that will help both states understand the Illinois River Watershed and the phosphorus problems in it.

Both Arkansas and Oklahoma have decided that working cooperatively is more effective than litigation to achieve the long-term goal of nutrient reduction in the Illinois River Watershed. Arkansas is working to reduce phosphorus in this important watershed, including developing

protective permits for the NACA and Springfield facilities as one example of our coordinated efforts pursuant to the MOA.

2. Arkansas has promulgated narrative and site-specific nutrient regulations that are used to establish effluent limits for permits in Arkansas

Arkansas's narrative nutrient criteria, promulgated at APC&EC Rule 2.509(A) provides, "Materials stimulating algal growth shall not be present in concentrations sufficient to cause objectionable algal densities or other nuisance aquatic vegetation or otherwise impair any designated use of the waterbody." Rule 2.509(A) further recognizes that assessing the impact of nutrients is complicated and can be site specific. The Rule provides, "nutrient water column concentrations do not always correlate directly with stream impairments" and identifies multiple factors that must be assessed.

APC&EC Rule 2.509(B) interprets Arkansas's narrative criteria for permitted discharges into waters that are 1) officially listed on Arkansas's impaired waterbody list (303d) with phosphorus as the major cause, or 2) designated as a nutrient surplus watershed if point source discharges are shown to provide a significant phosphorus contribution to waters within the listed nutrient surplus watersheds as determined by Arkansas law. Rule 2.509(B) further provides, "[f]or discharges from point sources which are greater than 15 mgd, reduction of phosphorus below 1 mg/L may be required based on the magnitude of the phosphorus load (mass) and the type of downstream waterbodies (e.g., reservoirs, Extraordinary Resource Waters). Additionally, any discharge limits listed above may be further reduced if it is determined that these values are causing impairments to special waters such as domestic water supplies, lakes or reservoirs or Extraordinary Resource Waters."

EPA has asserted that the effluent limits in the NACA and Springdale permits, which are based on Arkansas's promulgated regulations and the considered policy decisions in the MOA, will cause an exceedance of either Arkansas or Oklahoma water quality standards, but EPA has not provided any data, analysis, or information to support its conclusion. It is on the basis of this unsupported conclusion that EPA asserts that water quality based effluent limits must be included in the permits, pursuant to 40 CFR 122.44(d).

3. Arkansas's use of offsets in the NACA permit is lawful and appropriate

The draft NACA permit included two tiers of phosphorus discharge limits. The Tier I limit is identical to NACA's prior permit—0.1 mg/L with a design flow of 3.6 mgd. The Tier II limit would increase to 0.35 mg/L with an increased design flow of 7.2 mgd. The Tier II limit in the draft permit was intended to acknowledge the significant watershed-wide phosphorus reductions that would result from the NACA facility expansion. NACA's expansion would allow the addition of new customers currently served by systems in the watershed that provide little to no phosphorus reduction treatment. After the public comment period closed, DEQ considered how to address the questions related to the Tier II limit and engaged with Oklahoma and EPA to discuss the issue.<sup>1</sup>

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<sup>1</sup> Despite the fact that EPA did not comment on or object to the phosphorus limit during its review of the draft permit, DEQ engaged with EPA in good faith and in an effort to find common ground.



Through these discussions, EPA encouraged DEQ to pursue an offset requirement in the final permit—one that would mandate the phosphorus reductions that DEQ expected to see as a result of NACA’s expansion. (See Exhibit 9.) EPA’s recommendation was consistent with Congressional testimony it provided in 2010 in which EPA stated that it would be comfortable if a facility like NACA had a discharge limit above 0.1 mg/L “if the discharger demonstrates that other pollutant source reductions will offset its discharge and result in a net decrease in loadings” (See Exhibit 12.)

DEQ adopted EPA’s recommendation and developed language for the final NACA permit that unequivocally mandates the complete offset of 6,575 pounds of phosphorus per year—the expected amount of increase from the Tier II limit of 0.35 mg/L—before the Tier II limit becomes effective. Importantly, EPA has not objected to the use of offsets to meet water quality standards. Indeed, EPA’s April 1, 2022 letter clearly supports the use of offsets and other market-based approaches for improving water quality. We appreciate that and look forward to working with EPA in the future to more fully implement these concepts in the Illinois River Watershed and statewide.

EPA has also not disagreed with or objected to DEQ’s conclusion that 6,575 pounds of phosphorus per year is the appropriate amount to offset due to the change from Tier I to Tier II limits. Nor has EPA objected to the final permit language that requires reductions of 6,575 pounds per year (or more) to be documented and certified before the Tier II limits become effective. What EPA has objected to is the potential future use of the Cave Springs connection to NACA as the basis for an annual 6,575 pound offset. To be clear, EPA’s objection to the NACA permit is driven by EPA’s disagreement with an *example* of how future offsets may be calculated that DEQ provided in the final permit fact sheet. EPA’s objection to a potential future offset calculation and certification is not a proper basis for a permit objection.

In any case, DEQ engaged with EPA for months prior to finalizing the NACA permit in an effort to address EPA’s recommendations. (See Exhibits 7 thru 14.) DEQ provided example calculations to EPA of potential offsets from future regional connections and, at EPA’s request, revised the calculations to account for the amount of phosphorus that would be removed by plant uptake. (See Exhibit 14.) Through this process, DEQ realized that less than ten percent (10%) of the phosphorus could be removed by plant uptake (<https://www.uaex.uada.edu/publications/pdf/FSA-1029.pdf>) As a result, DEQ applied an additional “trading ratio” of 1:1.5 to further offset the remaining phosphorus. The “trading ratio” is a measure to ensure that any uncertainty in the amount of phosphorus will be removed from regional connections than will be added by the change from Tier I to Tier II limits is addressed.

Each time DEQ presented information to EPA, the information was rejected and EPA reiterated its position that a phosphorus limit of 0.1 mg/L is required for the NACA permit. During an April 11, 2022, meeting NACA and DEQ asked EPA for a method that EPA would accept to calculate future offsets appropriately. In response, you, in your capacity as EPA Region 6 Water Division Chief, informed DEQ and NACA that even if NACA could demonstrate an offset, that offset would not get around the 0.1 mg/L effluent limit. This statement appears to contradict EPA’s affirmation of offsets in its April 1, 2022 response to DEQ and clearly signals EPA’s view that 0.1 mg/L is a mandatory effluent limitation.

As described in both the January 21, 2022, and April 1, 2022, objection letters, EPA does not agree that connecting the Cave Springs community to the NACA treatment system will result in reductions of 6,575 pounds of phosphorus per year. DEQ would like to clarify that the final permit does not authorize or require NACA to certify that Cave Springs has connected to the NACA treatment system, nor does the permit state that, should Cave Springs connect to NACA in the future, the offset would automatically be demonstrated and certified for purposes of compliance with Part II, Section 9.b. of the final permit. While the Cave Springs connection is planned, and is understood to be moving forward, the reality is that those offsets have not yet occurred and the permittee has not yet attempted to demonstrate that connecting the Cave Springs community to NACA's treatment plant will offset the change from Tier I to Tier II limits. Again, EPA's disagreement with how potential future offsets from the Cave Springs connection could be documented is not an appropriate basis for objecting to the permit. (See Exhibit 15, Section II, Part 9(b) of the NACA Permit)

When DEQ receives a certified submission from the permittee that requests DEQ approval pursuant to Part II, Section 9.b. of the permit, DEQ evaluates all information and facts presented to determine if the claimed offsets meet the permit requirements. DEQ would welcome productive dialogue with EPA concerning how potential future offsets may be calculated and demonstrated for this purpose; however, DEQ is concerned that EPA has recently sent mixed messages about the true viability of offsets in the NPDES permit program.

#### 4. DEQ's effluent limits are protective

DEQ has issued permits to NACA and Springdale that comply with Arkansas's regulations for nutrient effluent limits and DEQ's specific standards for nutrients that apply to all surface waters in nutrient surplus areas, which includes the Illinois River Watershed. DEQ has also agreed to additional reductions in its MOA with Oklahoma. The effluent limits in the NACA and Springdale permits are consistent with the CWA, Arkansas law and policy, and are supported by a robust administrative record.

In the case of NACA, the Tier I limits and Tier II limits, including the required offsets, achieve a functional discharge limit of 0.1 mg/L. This is the limit that EPA asserts is necessary to achieve compliance with Arkansas's water quality standards. Under either tier of discharge limits in the NACA permit, the same amount of phosphorus (or less in the case of potential Tier II offsets) will reach the watershed. EPA's objection is without merit.

In the case of Springdale, DEQ's permit maintains the same phosphorus discharge limit as the prior permit. In its objection, EPA seeks to impose a lower effluent limit that will not result in a meaningful reduction to the eutrophication potential from Springdale's effluent than what is thought to be achieved through the limits in the MOA. EPA's objection would require Springdale to spend substantial resources to achieve an effluent limit that has not been proven to provide any environmental or human health benefit beyond what may be achieved with the limits contemplated by the MOA. Those costs will be passed on to the residents of Springdale and the burden will likely be hardest on the communities in Springdale that DEQ has identified as communities with Environmental Justice (EJ) concerns. DEQ does not believe that imposing an additional financial burden on any community is appropriate when the burden will result in no, or at best, marginal,

environmental benefit. EPA's position is all the more untenable when considering that Springdale is already required to conduct an analysis of potential phosphorus reduction opportunities that may be implemented through permit modifications during the next permit cycle in accordance with the MOA. DEQ's conclusions are also supported by EPA's recent analysis of the life cycle effect of phosphorus treatment technologies.

Any effluent limit for phosphorus that is derived from Arkansas's narrative nutrient criteria would be based on reducing the eutrophication potential of the receiving water. See APC&EC Rule 2.509. EPA asserts in its objections that any phosphorus effluent limit greater than 0.1 mg/L would violate Arkansas's narrative nutrient criteria, but that position is not supported by the record or by EPA's own recent analysis of the life cycle effect of phosphorus treatment technologies on watersheds. (EPA Report on Nutrient treatment, August 2021.) EPA's life cycle analysis considered the following impacts from treatment technologies: eutrophication potential, cumulative energy demand, global warming potential, acidification potential, fossil depletion, smog formation potential, human health-particulate matter formation potential, ozone depletion potential, water depletion, human health-cancer potential, human health-noncancer potential, and ecotoxicity potential. According to EPA, phosphorus treatment technologies that reduce phosphorus concentrations to 1 mg/L have the largest impact in terms of reducing the eutrophication potential of the effluent. Treatment technologies that produce lower phosphorus concentrations can provide an additional reduction in eutrophication potential, but that reduction is smaller because the technologies themselves can counteract the benefits of the lower concentrations. EPA's analysis also indicates that phosphorus treatment technologies that can achieve concentrations less than 1 mg/L provide basically the same lifecycle reduction in eutrophication potential (i.e., technologies that can achieve concentrations between 0.3 mg/L and /0.1 mg/L reduce the eutrophication potential to the same level). (EPA Report on Nutrient treatment, August 2021.)

#### **B. EPA's preferred effluent limit is not supported by science or law**

EPA has identified its preferred effluent discharge limitation for phosphorus and is attempting to promulgate that limit statewide without any rulemaking procedure and without sufficient basis in science or law. In its objection letters, EPA asserts, "[t]he 0.1 mg/L TP limit is a water quality-based limit established under 40 C.F.R. 122.44(d) as a translation of Arkansas's narrative nutrient water quality criterion. It is based on the EPA's 304(a) Gold Book recommended criterion and has been determined sufficient to meet Oklahoma's 0.037 mg/L water quality criterion for TP. See 40 CFR 122.44(d)(1)(vi)(B)." (See Exhibit 2.) Upon close review, EPA's assertions fall apart.

##### **1. EPA has not translated Arkansas's narrative criterion**

First, although EPA asserts that 0.1 mg/L is based on "a translation of Arkansas's narrative nutrient water quality criterion," EPA has not shared that translation with DEQ. In other words, what is the target water quality standard that this effluent limit is necessary to achieve? In years past, including as referenced in EPA's 2010 Congressional Testimony, EPA has applied a reference stream approach to develop potential water quality targets for the Illinois River. However, with the establishment of its updated Nutrient Lakes Criteria EPA has acknowledged that the science has evolved and the reference stream approach does not account for the significant complexities of nutrient reactions within a waterbody. If EPA has translated Arkansas's narrative criteria (see Rule

2.509(A) above) into a numeric water quality criteria, DEQ is unaware of the equation or the inputs used and has not been provided a copy of the criteria EPA established. As a result, DEQ is unable to accept or adopt the effluent limitation EPA has asserted is necessary to meet it. A mere statement that a numerical effluent limit is a translation of a narrative water quality standard without supporting documentation, evaluation, and scientific support is not sufficient to support such a “translated” limit.

## 2. The Gold Book does not provide a basis to establish effluent limitations

EPA further asserts that the 0.1 mg/L is “based on the EPA’s [CWA section] 304(a) Gold Book Recommended criterion.” As you know, section 304(a) of the CWA requires EPA to develop recommended water quality criteria that can be used by states or EPA to establish water quality standards. The 1986 Gold Book establishes 304(a) recommended criteria for dozens of pollutants. Concerning elemental phosphorus, the Gold Book provides a recommended criterion of 0.10 ug/L for elemental phosphorus in marine or estuarine waters. The NACA facility does not discharge elemental phosphorus, nor does it discharge to marine or estuarine waters. So this recommendation is not relevant to the NACA permit. The Gold Book does not provide any other national recommended water quality criteria for phosphorus. Concerning total phosphorus, the Gold Book provides some discussion and information it believes would support a criterion for total phosphorus, but it stops short of establishing a 304(a) recommended criteria for total phosphorus explaining that “[n]o national criterion is presented for phosphate phosphorus.” Because the Gold Book does not provide a CWA 304(a) criterion for phosphorus, it cannot be used to support a water quality based effluent limit pursuant to 40 C.F.R. 122.44(d)(1)(vi)(B).

DEQ acknowledges that the Gold Book states, “[a] desired goal for the prevention of plant nuisances in streams or other flowing waters not discharging directly to lakes or impoundments is 100 ug/L total P.” This statement is followed by a citation to the 1973 book *Toward a Cleaner Aquatic Environment* by Kenneth Mackenthun, in which Mackenthun states, “A considered judgment suggests that to prevent biological nuisances, total phosphorus should not exceed 100 ug/L TP at any point within the flowing stream.” One individual’s theory that suggests a particular in stream concentration, which does not cite any scientific study or meta-analysis of data, is not a scientific rationale for establishing a water quality based effluent limit.

EPA could have pursued the development of a water quality based effluent limit pursuant to 40 C.F.R. 122.44(d)(1)(vi)(A), which allows the permitting authority to use an “explicit State policy or regulation interpreting its narrative water quality criterion,” among other things, but as explained above EPA declined to consider Arkansas’s regulations or the state’s considered policy decisions reflected in the MOA.

## 3. EPA’s claims that its 0.1 mg/L effluent limit is site-specific ring hollow.

In its most recent letter, dated April 01, 2022, EPA asserts that the 0.1 mg/L effluent limits for both NACA and Springdale facilities are “site-specific.” DEQ is dubious of this late-arriving characterization of EPAs preferred 0.1 mg/L limit.

Although EPA asserts that it is “site-specific” the agency has provided no site-specific information upon which this effluent limit was based and no explanation for why both facilities require the same site-specific effluent limit. Further undermining the site-specific nature of the 0.1 mg/L limit, EPA has commented on no less than eleven (11) other of DEQ’s draft permits and suggested that the 0.1 mg/L be considered for each and every one of those facilities. Specifically, EPA has requested that the permit writers for each of those eleven other permits evaluate the reasonable potential for the proposed discharge to exceed Arkansas’s narrative water quality standard, and then cites the Gold Book to support its recommendation that a phosphorus limit that does not exceed 0.1mg/L. (See Exhibit 2) It is theoretically possible that EPA has conducted site-specific analyses for the NACA and Springdale facilities, and for each of those eleven other facilities across the state and in unrelated locations, and come up with the exact same site specific effluent limit for all thirteen facilities. While theoretically possible, it is statistically and scientifically improbable. The more likely scenario and the one supported by the record is that EPA would like Arkansas to adopt the 0.1 mg/L limitation as a statewide standard and, failing DEQ’s cooperation, EPA is attempting to mandate it through the misuse of the permit objection process.

### **C. Backsliding**

EPA’s claim that the NACA permit violates anti-backsliding requirements is not supported by the final permit language or the record. The relevant provision of the federal regulations states, “when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62.)” 40 C.F.R. 122.44(I)(1). As an initial matter, the Tier II limit (including the mandatory offset provision) in the final NACA permit will control the same amount (or greater) of phosphorus discharges to the Illinois River Watershed as the Tier I limit. In other words, the new permit limit is as stringent as the prior permit limit and there is no anti-backsliding concern. Given the language in the final permit requiring the permittee to provide “certification” that the required offsets have occurred, should DEQ learn that sufficient offsets have not occurred prior to the Tier II limits becoming effective, which could be a basis to pursue enforcement. DEQ has sufficient regulatory authority to ensure compliance.

Even if EPA could argue that the Tier II limit (including the mandatory offset) is less stringent than the prior limit, the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued, thus constituting cause for permit modification or revocation and reissuance under 40 C.F.R. § 122.62. We understand that EPA does not agree that the facility expansion can be the basis to apply this exception because NACA once projected it could expand up to 80 mgd. DEQ disagrees with EPA on that point, but also clarifies that the proposed expansion is not the sole basis to apply the exception in 40 C.F.R. § 122.62. In NACA’s case, the permit renewal application also identified additional waste sources, added hydraulic capacity, additional treatment processes, and regionalization of the existing untreated phosphorus loading from several additional communities. The Tier II phosphorus limits and corresponding mass limits do not constitute backsliding when applied to this NACA permit modification because the exception to backsliding has been met; the circumstances on which the previous permit was issued have substantially and materially changed.

#### **D. EPA's 30-day average is not supported**

The NACA and Springdale permits establish a rolling six-month average phosphorus limit. These permit limits are consistent with science concerning the effect of phosphorus in water resources, including in the Illinois River Watershed, and Oklahoma's recently updated numeric water quality standard. DEQ is also aware of some EPA-approved phosphorus limits that are based on annual loading, rather than the six-month rolling average in the NACA and Springdale permits. EPA's April 01, 2022, letter acknowledges that "there is no statutory or regulatory prohibition on the use of a 6-month rolling average" but nonetheless has objected to this provision and demanded that DEQ adopt a 30-day average because, "[t]he EPA determined that a 0.1 mg/L TP limit as a 30-day average is the appropriate effluent limit for the NACA permit to protect the applicable water quality criteria." EPA has provided no legal, scientific or technical explanation or support for either its objection or its demand that DEQ impose a 30-day average. EPA's lack of transparency fits the definition of arbitrary and capricious.

Because phosphorus is a conventional, non-toxic pollutant, its impacts are integrated throughout the aquatic system over time. The effects of daily phosphorus concentration variations alone are only one factor which may fuel a system throttled by a host of other factors and altogether will be expected to result in periodic or seasonal trends. As discussed in guidance, EPA encourages developing TMDLs using averaging periods that are appropriate for the pollutant being addressed (Goodin 2007). EPA also recognizes that for conventional, non-toxic pollutants like phosphorus, the assessment of long-term conditions, rather than short-term, daily conditions, are important for protecting water quality standards because these pollutants do not directly or immediately impact the aquatic system. Instead, nutrients are integrated through biological and physical processes over time (Hanlon 2004). Consistent with this science, EPA has approved an annual average for the phosphorus concentration limit based on the Town Branch TMDL. (See Exhibit 22.)

Additionally, Oklahoma's numeric standard assessment methodology acknowledges seasonal affects through consideration of a six-month rolling evaluation of phosphorus excursions to determine impairment status. The Oklahoma criteria and the corresponding assessment methodology were based on comprehensive studies on the Illinois River performed over many years. These Illinois River study results are also the basis for many of the recent milestones and agreements made pursuant to the MOA and they cannot be overlooked when considering phosphorus discharges to the Illinois River Watershed.

#### **Conclusion**

DEQ reaffirms its position that both the NACA and Springdale permits were issued in compliance with applicable state and federal law. The procedural posture that EPA has taken in its objections is in excess of its statutory and regulatory authority, and the permit limits it seeks to impose, including those so-called "site specific" discharge limits, have no firm basis in science or law. Indeed, EPA's actions demonstrate that it seeks to impose a 0.1 mg/L effluent discharge statewide through its untimely permit objection process in a manner that evades all of the requirements of the Administrative Procedure Act, including public notice and comment regarding those actions. EPA's actions therefore constitute illegal rulemaking and are fundamentally arbitrary and capricious and an abuse of agency discretion.

With its objections EPA is also trampling on a collaborative and fruitful relationship between two CWA delegated authorities that have successfully reduced phosphorus and are currently working together to improve water quality in the Illinois River Watershed—the antithesis of the CWA’s foundation of cooperative federalism.

Respectfully, I again ask that you withdraw the objections to the NACA and Springdale permits so that DEQ and EPA may once again attempt to work together collaboratively to promote long-term water quality improvements in the Illinois River Watershed. While you reconsider your position and corresponding lack of foundation for your objections, Arkansas has no choice but to protect its sovereign interests through litigation while ensuring a fair, transparent and scientifically-defensible regulatory environment for its stakeholders.

Sincerely,

Alan J. York  
Associate Director  
Office of Water Quality, Division of Environmental Quality  
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cc: Becky Keogh  
Secretary  
Arkansas Department of Energy and Environment

Wes Ward  
Secretary  
Arkansas Department of Agriculture

Kenneth Wagner  
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Blayne Arthur  
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Dr. Chuck Carr Brown  
Secretary  
Louisiana Department of Environmental Quality

Toby Baker  
Executive Director  
Texas Commission of Environmental Quality

## CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and Circuit Court Rule 26.1, Petitioner provides the following corporate disclosure statement:

1. Petitioner Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) is an agency of the State of Arkansas that is responsible for administering and enforcing the State's environmental protection statutes and regulations, including the National Pollutant Discharge Elimination System permit program that DEQ is authorized to implement pursuant to the federal Clean Water Act, 33 U.S.C. § 1342(b).



Dated: April 21, 2022

/s/ David P. Ross

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## CERTIFICATE OF FILING AND SERVICE

I certify that on April 21, 2022, I filed the foregoing Petition For Review with the Clerk of the U.S. Court of Appeals for the Eighth Circuit using the CM/ECF System. Participants in the case who are registered CM/ECF users will be served by the CM/ECF system.

Pursuant to Federal Rules of Appellate Procedure 15(c) and 25(d), I certify that on April 21, 2022, I will cause true and correct copies of this Petition For Review to be served by first class mail, postage prepaid, on the following parties

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Dated: April 21, 2022

/s/ T. Scott Mills

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