111TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
111–407

RESOLUTION OF INQUIRY REQUESTING THE PRESIDENT TO TRANSMIT TO THE HOUSE OF REPRESENTATIVES COPIES OF CERTAIN DOCUMENTS IN THE POSSESSION OF THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

JANUARY 29, 2010.—Referred to the House Calendar and ordered to be printed

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Mr. OBERSTAR, from the Committee on Transportation and Infrastructure, submitted the following

R E P O R T

[To accompany H. Res. 995]

The Committee on Transportation and Infrastructure, to whom was referred the resolution (H. Res. 995) of inquiry requesting the President to transmit to the House of Representatives all information in the possession of the Administrator of the Environmental Protection Agency relating to nutrient management of the Illinois River Watershed, Arkansas and Oklahoma, having considered the same, report thereon with amendments and without recommendation.

The amendments are as follows:

Strike all after the resolving clause and insert the following:

That the House of Representatives requests the President to transmit to the House of Representatives, not later than 30 days after the date of adoption of this resolution, copies of all technical and scientific documentation in the possession of the Administrator of the Environmental Protection Agency relating to the Administrator's technical and scientific rationale for the establishment of a total phosphorus limit of 0.1 milligram per liter for the Northwest Arkansas Conservation Authority wastewater treatment facility, Arkansas.

Amend the title so as to read:

Resolution of inquiry requesting the President to transmit to the House of Representatives copies of all technical and scientific documentation in the possession of the Administrator of the Environmental Protection Agency relating to the Administrator's technical and scientific rationale for the establishment of a total phosphorus limit of 0.1 milligram per liter for the Northwest Arkansas Conservation Authority wastewater treatment facility, Arkansas.

PURPOSE OF THE LEGISLATION

House Resolution 995, as amended, requests the President to transmit to the House of Representatives, not later than 30 days after the date of adoption of this resolution, copies of all technical and scientific documentation in the possession of the Administrator of the Environmental Protection Agency relating to the Administra-

tor's technical and scientific rationale for the establishment of a total phosphorus limit of 0.1 milligram per liter for the Northwest Arkansas Conservation Authority wastewater treatment facility, Arkansas.

BACKGROUND AND NEED FOR LEGISLATION

H. Res. 995 is a resolution of inquiry that, pursuant to clause 7 of rule XIII of the Rules of the House of Representatives, directs the Committee to act on the resolution within 14 legislative days, or a privileged motion to discharge the Committee is in order. Under the rules and precedents of the House, a resolution of inquiry is a means by which the House requests information from the Executive Branch.

Proposed Clean Water Act discharge standard for NACA wastewater treatment facility

The central focus of H. Res. 995 relates to the establishment of a permissible Clean Water Act discharge standard for phosphorus for the planned Northwest Arkansas Conservation Authority (NACA) regional wastewater treatment facility, to be located in Benton County, Arkansas.

For more than three decades, the States of Arkansas and Oklahoma have been in conflict over the protection of the Illinois River watershed that runs from northwest Arkansas into eastern Oklahoma. In the late 1980s, the State of Oklahoma challenged an Arkansas National Pollutant Discharge Elimination System (NPDES) permit for a Fayetteville, Arkansas sewage treatment plant that proposed to discharge into the Illinois River watershed. In the case of *Arkansas* v. *Oklahoma* (503 U.S. 91 (1992)), the U.S. Supreme Court unanimously ruled in support of a decision by the Environmental Protection Agency (EPA) to disapprove the Arkansas permit, stating that the phosphorus limit contained in the permit would likely have violated water quality standards in the State of Oklahoma in violation of the Clean Water Act.

Since 2002, the State of Oklahoma has listed the Illinois River as being impaired for total phosphorus. The State of Arkansas does not list the Illinois River as impaired for phosphorus, but, at the direction of EPA, listed Osage Creek, a tributary of the Illinois River, as impaired for phosphorus. The Osage Creek is the likely point of discharge for the proposed NACA wastewater treatment facility.

In 2002, Oklahoma adopted a water quality standard for the Illinois River that includes a numeric limit for phosphorus of 0.037 milligram per liter (mg/L). The State of Oklahoma has committed to achieve this standard by June 30, 2012.

In 2003, the States of Arkansas and Oklahoma entered into "Statement of Joint Principles and Actions" that committed both States to "achieve water quality improvements in the affected watersheds consistent with Oklahoma's criterion for total phosphorus [of 0.037 mg/L]." To that end, the Statement committed both States to issue interim Clean Water Act NPDES permits for certain designated facilities along the Illinois River with discharge limits of 1 mg/L, and to reissue such permits on a normal five-year cycle "with the understanding that NPDES permits . . . issued in the year

2012 or beyond must include phosphorus limits stringent enough to meet applicable water quality standards."

In 2008, the Arkansas Department of Environmental Quality (ADEQ) proposed to issue a NPDES permit for the NACA facility at a discharge limit of 1 mg/L phosphorus. Both EPA and the Oklahoma Department of Environmental Quality (ODEQ) objected to the permit on the grounds that the proposed discharge would violate the Clean Water Act requirement that "[n]o permit may be issued . . . [t]o a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards." See 40 CFR § 122.4.

In this instance, both EPA and ODEQ concluded that ADEQ's proposed discharge limit of 1 mg/L phosphorus for the NACA facility would violate Oklahoma's water quality standard for phosphorus of 0.037 mg/L. In addition, EPA believes that the 1 mg/L proposed standard is not stringent enough to meet the water quality standard for the Osage Creek, Arkansas. EPA has proposed an alternative discharge standard of 0.1 mg/L phosphorus for the NACA facility, which it believes would avoid violation of Oklahoma's water quality standard.

On April 13, 2009, ADEQ revised its proposed permit for the NACA facility to allow a total phosphorus discharge limit of 1 mg/L until June 30, 2012, but includes a total phosphorus limit of 0.1 mg/L that becomes effective July 1, 2012. This revised permit is consistent with concerns raised by EPA and ODEQ. In light of this revision, on April 16, 2009, EPA formally withdrew its objections to the proposed NPDES permit for the NACA facility.

Information requests of Representative Boozman with the Environmental Protection Agency

The proposed NACA facility is located in the Third Congressional District of Arkansas, represented by Congressman John Boozman. Since December 2008, EPA and Representative Boozman have had an ongoing dialogue regarding the proposed phosphorus limit, including letters, emails, conference calls, and face-to-face meetings.

EPA has provided Representative Boozman with five formal responses to specific questions raised by the Congressman and his staff. The focus of Mr. Boozman's inquiry has been on: (1) The scientific basis for establishing a 0.1 mg/L standard, including the differences in downstream impacts between a 1 mg/L limit and a 0.1 mg/L limit; (2) the number of wastewater facilities in the nation that have a 0.1 mg/L limit for phosphorus; (3) whether EPA is engaged in "selective enforcement" against the NACA facility; and (4) whether other point sources that discharge into the Illinois River will also have to adopt a 0.1 mg/L discharge standard.

The concerns raised were addressed in several formal letters, emails, and discussions between Representative Boozman and EPA officials. On January 7, 2009, EPA provided Representative Boozman a November 6, 2008 letter from EPA to ADEQ, which requested additional information from ADEQ on whether the proposed discharge limit of 1 mg/L total phosphorus contained in the draft NACA NPDES permit "was adequate in a watershed already impaired by phosphorus, when treatment technologies are available to achieve a lower limit." On January 19, 2009, EPA followed up with an email that answered specific questions raised by Rep-

resentative Boozman regarding the 1 mg/L standard, and the basis for EPA determining that this standard was insufficient to meet water quality standards.

On January 22, 2009, EPA participated in a conference call with Representative Boozman regarding the phosphorus limits proposed in the draft NPDES permit for the NACA facility, and in which Representative Boozman asked for more detailed information about the 1 mg/L standard and the EPA permitting process. On February 5, 2009, EPA provided Representative Boozman with the information that he requested on the conference call. On February 7, 2009, Representative Boozman sent a letter to EPA requesting additional information on the rationale for the 0.1 mg/L total phosphorus limit, as well as a list of facilities that have been required to meet this standard. On February 26, 2009, EPA submitted the additional requested information to Representative Boozman.

On April 2, 2009, EPA met with Representative Boozman in Washington, DC, to further discuss his concerns regarding the 0.1 mg/L phosphorus standard. On April 27, 2009, EPA sent a letter to Representative Boozman answering various questions posed during the April 2, 2009 meeting, and enclosed a summary of EPA's modeling efforts that projected the water quality impacts under various discharge scenarios, a listing of other states that have similar phosphorus water quality criteria, and a listing of other permits that contain stringent limits for phosphorus.

On January 19, 2010, the EPA placed in the *Federal Register* a Call for Data for the Illinois River Watershed, Oklahoma and Arkansas, to gather information to assist EPA in developing a watershed model to use to determine the phosphorus loads necessary to meet water quality standards in both States, and to devise allocations and potential nutrient controls from point and non-point sources. On January 21, 2010, EPA officials publicly committed to both Chairman Oberstar and Representative Boozman to "open and transparent decision making based on the best available technical and scientific data and analytical tools" and to ensure that Representative Boozman "completely understand[s] the data and the technical, scientific, and legal rationale behind the determination that a total phosphorus limit of 0.1 mg/L for the NACA wastewater facility is appropriate to protect applicable water quality standards for Arkansas and Oklahoma." To that end, EPA has offered to brief Representative Boozman "on the data, modeling and any other questions . . . related to this determination" at a time convenient to Representative Boozman.[1]

[1] *See* Letter from Al Armendariz, EPA Region 6 Administrator, to the Honorable John Boozman (Jan. 22, 2010).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

FEB -5 2009

The Honorable John Boozman
House of Representatives
Washington, DC 20515

Dear Congressman Boozman:

Thank you for providing us an opportunity to meet with you and your staff via conference call on Thursday, January 22, 2009. We appreciate and acknowledge your concerns regarding the phosphorus limits proposed in the draft National Discharge Elimination System (NPDES) wastewater discharge permit for the yet-to-be constructed Northwest Arkansas Conservation Authority (NACA) wastewater treatment plant AR0050024. Per your request, I am enclosing the following documents we have discussed and on which your office raised questions:

1. The U. S. Environmental Protection Agency (EPA) Region 6 interim objection letter (IOL) to the draft NACA permit proposing an increase in design flow from 0.5 to 3.6 million gallons per day dated November 6, 2008 (Enclosure A);
2. The Arkansas Department of Environmental Quality (ADEQ) response to EPA's IOL dated December 3, 2008 (Enclosure B);
3. The Oklahoma Department of Environmental Quality (ODEQ) comments on the draft NACA permit dated January 8, 2009 (Enclosure C);
4. The EPA Region 6 specific objection letter (SOL) dated January 16, 2009 (Enclosure D);
5. Correspondence and resources providing rationale for the proposed 0.1 mg/l total phosphorus (TP) limit and resources for advanced phosphorus treatment and removal technologies (Enclosures E and F);
6. Information pertaining to other wastewater treatment plants throughout the country and EPA Region 6 (New Mexico) with 0.1 mg/l TP limits (Enclosure G);
7. Information on other major municipal NPDES permits issued in the Illinois River watershed of Northwest Arkansas and their expiration dates relative to the 2012 target in the "Joint Principles and Actions" (Enclosure H); and
8. Information on the permit appeal process and EPA's interpretation of the "2012 and beyond" reference in the "Joint Principles and Actions" (Enclosure I).

Based on the enclosed information, we believe that EPA's course of action is scientifically valid, environmentally protective and legally sound. However, we stand open to continue working with all stakeholders towards a mutually acceptable resolution that would achieve those same objectives.

Thank you for your support and interest in helping protect the environment. I hope you find the information we have provided adequate. If, after reviewing the materials, you feel there may be a need for additional information, or should you have further questions, please feel free to contact me or your staff may contact LaWanda Thomas at (214) 665-7466.

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

Enclosures (9)

w/out Enclosures
cc: Steve Drown, Director, Water Quality Division, ADEQ
John Sampier, Northwest Arkansas Conservation Authority

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733
NOV 26 2008

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7007 1490 0000 3068 8146)

Mr. Steve Drown
Chief
Water Division
Arkansas Department of Environmental Quality
P. O. Box 8913
Little Rock, AR 72219-8913

Re: Interim Objection to Preliminary Draft Permit
Northwest Arkansas Conservation Authority (NACA)
NPDES Permit No. AR0050024

Dear Mr. Drown:

We have reviewed the draft permit for Northwest Arkansas Conservation Authority (NACA). Based on our initial review, we believe additional information is needed to support a finding that the proposed discharge will meet the guidelines and requirements of the Clean Water Act; and, satisfy the regulatory requirements of 40 CFR Parts 122 and 125.

In accordance with the requirements of 40 CFR § 122.4(i) (prohibitions on issuance of a discharge permit to a new source/new discharger for a discharge to impaired waters), the fact sheet must demonstrate that the new discharger meets NPDES requirements for impaired waterbodies and that the new discharge will not cause or contribute to a violation of water quality standards for pollutants of concern. In this case, neither the permit nor the fact sheet provides the necessary demonstration that the new discharge will not cause or contribute to a violation of water quality standards in an impaired receiving segment. In particular, the fact sheet does not provide a sufficient basis for determining whether the proposed effluent limitations for phosphorous are appropriate, given the existing phosphorous impairment in the receiving segment.

In addition, in establishing effluent limitations based on best professional judgment (BPJ) in accordance with 40 CFR § 125.3 (establishment of BPJ permit limits on a case by case basis), the permitting authority must consider the appropriate technology related to the point source category, as well as any unique factors relating to the applicant, based on all available information. Given that NACA is a new wastewater treatment facility in the design and pre-construction phase, all treatment technology options must be considered in establishing the BPJ technology based permit limits for phosphorous. An additional resource to be considered in establishing an achievable technology based limit for phosphorous is the recent publication: *Municipal Nutrient Removal Technologies Reference Document*, dated September 2008. This document provides technical and cost information on different treatment technologies and information on several case studies. This document is available on the internet at the following url: http://www.epa.gov/owm/mtb/index.htm. The current fact sheet does not include sufficient information to clearly indicate why an effluent limit of 1.0 mg/l for phosphorous is adequate in a

watershed already impaired for phosphorous, when treatment technologies are available to achieve a lower limit.

EPA requests that the Arkansas Department of Environmental Quality (ADEQ) expand its fact sheet discussion regarding: the assessment of potential impacts that the permitted discharge may have on the water quality standards of downstream States; the actions that will be taken to ensure that phosphorous laden sludge will be handled in a manner that will not impact the impaired receiving streams; and, the calculation of the daily maximum limit for phosphorous.

Thank you for providing us a copy of the draft proposed permit and fact sheet for review. If you have any questions or concerns regarding our comments, please call me at (214) 665-7101 or reply directly to Claudia Hosch at (214) 665-7170 or via e-mail at hosch.claudia@epa.gov.

Sincerely yours,

Miguel I. Flores

Miguel L Flores
Director
Water Quality Protection Division

cc: J.D. Strong, Secretary of the Environment, State of Oklahoma

ADEQ
ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7006 3450 0003 4073 3243)

December 3, 2008

Mr. Miguel I. Flores, Director
Water Quality Protection Division
United States Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Interim Objection to Preliminary Draft Permit
NPDES Permit Number AR0050024
Northwest Arkansas Conservation Authority (NACA)

Dear Mr. Flores:

The Department has reviewed your interim objection letter dated November 6, 2008 and agrees to revise the Fact Sheet (see attached) to provide a more sufficient basis for determining that the proposed phosphorus limitation of 1.0 mg/l is appropriate. In addition, the Department is offering the following comments for your consideration:

You stated in your letter that, "in accordance with the requirements of 40 CFR § 122.4(i) (prohibitions on issuance of a discharge permit to a new source/new discharger for a discharge to impaired waters), the fact sheet must demonstrate that the new discharger meets the NPDES requirements for impaired waterbodies and that the new discharge will not cause or contribute to a violation of water quality standards for pollutants of concern". The issue of whether Osage Creek is actually an impaired waterbody due to phosphorus is outside the scope of this permit decision. However, I refer you to correspondence we sent you dated May 22, 2007 (copy attached), addressing ADEQ's position on this issue and the proposed two-year comprehensive study to "thoroughly evaluate whether the existing designated uses are being impaired from any source (e.g., nutrients, sediments, etc) based on the current Arkansas water quality standards". Again, the Department must emphasize that the receiving stream, Osage Creek, has not been added to the Arkansas 303(d) list through an independent decision of the State and we continue our objection to its inclusion on the list. As you are aware, Arkansas does not have numeric water quality criteria for phosphorus and an intensive two-year scientific study which was conducted by ADEQ (ADEQ publication WQ97-03-1) showed that all designated uses for the waterbody were being met, as well as compliance with Arkansas's narrative nutrient criteria. This is still the case today. However, EPA disagreed with ADEQ's conclusion and made a decision to add Osage Creek as well as Spring Creek to the Arkansas 2002 303(d) list and has continued adding these segments to all subsequent lists.

Our position remains that the inclusion of a phosphorus limit of 1.0 mg/l for the NACA permit is consistent with the limitations given to other major municipalities in the Illinois River Basin, as required in Section 6.401(D) of Arkansas Pollution Control and Ecology Commission Regulation

No. 6 and as agreed in the Statement of Joint Principles and Actions signed on December 18, 2003 by ADEQ and Oklahoma. (Please see below for calculations which will be included in the fact sheet).

As you are aware, in 2004 ADEQ received a permit application for the Osage Basin Wastewater District to construct a new plant to discharge to Osage Creek. As a result of this permit application, EPA requested additional technical information to demonstrate that the monthly average effluent limitation of 1.0 mg/l for total phosphorus conforms to guidelines and requirements established by the Clean Water Act (CWA) and the NPDES regulations (i.e. 40 CFR § 125.3) and ADEQ provided this justification. Subsequently, EPA approved the permit for the Osage Basin Wastewater District with a total phosphorus limit of 1.0 mg/l. (Please see the attached EPA approval letter). Therefore, a phosphorus limit of 1.0 mg/l was continued from the previous EPA approval decision letter for the Osage Basin Wastewater District to this new proposed permit for NACA.

Oklahoma Water Quality Standards phosphorus Evaluation

The concentration of total phosphorus at the state line was compared to Oklahoma's applicable water quality standards as established in the Oklahoma Water Quality Standards. The following equation was used to calculate phosphorus instream waste concentration (IWC):

$$IWC = (CdQd + CbQb)/(Qd + Qb)$$

Where:

Cd = TP concentration at the state line = 1 mg/l X (1–46%) = 0.54 mg/l
IWC = Oklahoma Criteria = 0.037 mg/l
Qd = design flow = 3.6 MGD = 5.56 cfs
Qb = Critical flow 7-day, 2-year low-flow (7Q2 = 122 cfs) of the receiving stream.
Cb = background concentration = 0 mg/l

IWC = (0.54 X 5.56 + 0)/ (5.56 + 122)
IWC = 0.024 mg/l which is less than 0.037 mg/l

Pollutant	Cd, mg/l	C_s at state line, mg/l	IWC, mg/l	OWQS, mg/l	IWC<OWQS
Phosphorus	1	0.54	0.024	0.037	Yes

Additionally, in 2004, due to concerns about phosphorous loading in the Illinois River watershed, EPA strongly encouraged the construction of a large regional plant that is more energy and cost efficient. This recommendation was considered by NACA and various treatment technology options were evaluated for the new NACA Regional WWTP. The selected technologies are enhanced biological phosphorus removal (EBPR) using the A2O (anaerobic/anoxic/oxic) process as depicted in Figure 2-22 of the EPA publication titled *Municipal Nutrient Removal Treatment Technologies Reference Document (September, 2008)*. In

addition the facility will employ chemical addition and effluent polishing filters to ensure permit limitations are maintained. The effectiveness of the EBPR is enhanced by the removal of nitrates as an additional step in the A2O process. These processes are considered to be fully proven technologies, have acceptable capital and operating costs, and have the ability to consistently achieve low effluent phosphorus concentrations. Based on our calculations, discharges from the new NACA Regional WWTP can achieve low phosphorus limit (i.e. 0.70 mg/l) at Illinois River and at State line (i.e. 0.54 mg/l). However, EPA has failed to demonstrate to ADEQ that an effluent limit of 1.0 mg/l for phosphorus is <u>not</u> adequate for a receiving stream that currently meets all of its designated uses and is in compliance with applicable Arkansas nutrient criteria in spite of the fact that treatment technologies are available to achieve a lower limit.

It should also be noted that a review of a 2005 permit for the City of Tahlequah (permit No. OK0026964) shows the monthly average effluent limitation of 1 mg/l for Total Phosphorus to Tahlequah Creek then to Illinois River which is less than 1 mile from the discharge. This limit is identical to the effluent limitations imposed by ADEQ in NACA permit.

To be consistent with other permits in Northwest Arkansas (i.e. Rogers), the 7-Day Average limitation in the draft permit for NACA has been revised from 2 mg/l to 1.5 mg/l even though the limit of 2 mg/l was approved in 2004 by EPA. Additionally, a daily maximum limit of 1.5 – 2 times of monthly average is acceptable based on 1991 Technical Support Document Section 5.4.2" ... In the absence of other information, permit writers typically divide the MDL by 1.5 or 2.0 to derive an AML (depending on the expected range of variability)."

The mass limitations in the draft permit have been calculated in accordance with 40 CFR §122.45(b)(1)"... (b) *Production-based limitations.* (1) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on *design flow*" and the following formula:

Mass limit (lbs/day) = Monthly average Conc. (1 mg/l) X flow (3.6 MGD) X 8.34 = 30 lbs/day

Based on previously submitted information and the critical fact that the sludge from the proposed facility will be disposed of in a landfill and not land applied, there will be no net increase in phosphorus loading to the watershed from this facility. This permit also includes an upstream monitoring requirement for phosphorus that will provide data to assess potential impacts of phosphorus discharge from this facility.

For the reasons stated above and as delineated in the May 22, 2007 correspondence submitted to EPA, the Department continues to strongly disagree with the EPA decision to add Osage Creek to the list of impaired water bodies. However, as described in the May 22, 2007 correspondence, the third party study on Osage Creek for designated use attainment evaluation is currently being performed. The Department requests that the EPA defer any decision to reduce the total phosphorus limit to anything less that 1.0 mg/l, until this comprehensive evaluation is complete. This study is scheduled to be completed in mid 2009 and a final report submitted by December 2009. A re-opener clause is established in Part II of the draft permit and will allow the Department to modify the permit, if necessary, to include nutrient limits that are more stringent.

In conclusion, the Department has decided to continue the Monthly Average limitation of 1.0 mg/l from the previous permit. This limitation is identical to the limitations applicable to all other major municipal dischargers located in the Illinois River Basin. The wastewater treatment technology chosen by the permittee has been specifically selected to consistently achieve this permit limitation. Although the system can theoretically meet a lower Phosphorus limit, the Department has no justification for lowering the limit based upon the reasons stated above. In addition, because of the inclusion of the re-opener clause, the Department reserves the right to modify the permit based on the results of the current comprehensive water quality study being performed on Osage and Spring Creeks, if such data warrants the modification.

Thank you for your consideration in this matter. If there are any questions concerning this response, please contact me at (501) 682-0655, or Marysia Jastrzebski of my staff at (870) 446-5939.

Sincerely,

Steven L. Brown
Chief, Water Division

Enclosure

cc: Teresa Marks, Director, ADEQ
Steve Martin, Deputy Director, ADEQ
Marysia Jastrzebski, P.E., ADEQ
Claudia Hosch, Chief, NPDES Permits and TMDLs Branch, EPA
John Stampier, Executive Director, NACA

STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY
Governor

January 8, 2009

Ms. Claudia V. Hosch, Associate Director
NPDES Permits and TMDLs Branch
USEPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: **ADEQ Preliminary Draft Permit NPDES # AR0050024 for NACA Regional WWT**

Dear Ms. Hosch:

The Oklahoma Department of Environmental Quality (DEQ) has reviewed the draft permit, EPA's interim objection, and the response submitted by Arkansas Department of Environmental Quality (ADEQ) regarding the draft permit for the Northwest Arkansas Conservation Authority (NACA). DEQ has serious concerns about the impacts of this planned new discharge on Oklahoma waters in general and the unsupported proposal for a phosphorus limit of 1 mg/L in particular. We support your objection to the draft permit and urge that you maintain that objection unless a legally and technically valid proposal is put forth. We do not believe the rationale provided by ADEQ in the fact sheet and response provides any valid legal or technical basis to proceed with the permit as proposed.

Despite the ADEQ protestations, the fact is Osage Creek is included on the EPA approved 303(d) list and is impaired due to excessive phosphorus. The Illinois River downstream in Oklahoma is also impaired due to excessive phosphorus. As you correctly pointed out, issuance of this permit would constitute the authorization of a new discharge to a currently impaired receiving water. Under the Clean Water Act and its implementing regulations this is not allowed except under extremely limited circumstances, none of which have been demonstrated in this case. EPA Region 6 has developed guidance for permitting actions on impaired waters (see "Water Quality Assessment NPDES Permit Issuance Actions" flowchart – Final, September 29, 2003). There is no valid path through your flowchart that would allow issuance of the draft permit as proposed.

We also point out that the original "justification" for this permit, issued in 2006, was based on a purported offset of phosphorus loading from septic tanks expected to be eliminated by the treatment facility. This type of "trading" justification for new NPDES discharges to impaired waters was recently struck down by the courts. (See *Friends of Pinto Creek v. U.S.E.P.A.*, 504 F.3rd 1007, 1012 (9th Cir. 2007). Even the existing permit would seem to be invalid.

Much of the justification offered by ADEQ relates to the "Statement of Joint Principles and Actions" signed by Oklahoma and Arkansas in 2003 and the 1 mg/l phosphorus limit that

agreement allows as an interim measure for specified dischargers. That agreement has no applicability to the NACA or Osage Basin discharge and provides no basis for the proposed permit limits. Provisions for new discharges such as the proposed NACA facility were intentionally omitted from that agreement. The fact that other dischargers in the watershed have a limit of 1 mg/l while water quality standards in both Arkansas and Oklahoma are still violated seems to provide clear evidence that a limit of 1 mg/l is not adequate.

While ADEQ attempts to provide a technical justification, we wish to point out some of the flaws in the arguments put forward by the ADEQ to defend the proposed limit. First of all, we strongly disagree with ADEQ's calculation on how the new NACA Regional WWTP would affect the total phosphorus (TP) instream concentration in the Illinois River at the state line. The key assumption of ADEQ's calculation is that the background TP concentration is 0 mg/L at the state line. This is completely unrealistic as many other point and nonpoint sources of TP exist upstream in the watershed in addition to the proposed new plant. In fact, according to Arkansas's *2004 Integrated Water Quality Monitoring and Assessment Report - Prepared pursuant to Section 305(b) and 303(d) of the Federal Water Pollution Control Act*, the minimum measured TP concentration at station ARK0006 just above the state line was 0.072 mg/L with a maximum of 0.52 mg/L and an average of 0.25 mg/L (page A-185). Therefore, ADEQ's own data clearly shows that an assumption of a zero concentration of TP is not defensible.

Substituting the minimum concentration of 0.072 mg/L into the calculation presented by ADEQ's letter to EPA, and accepting for now all other parameter values in the calculation, one would get an IWC of 0.092 mg/L. That is nearly 2.5 times higher than Oklahoma's TP standard of 0.037 mg/L for that segment of the Illinois River immediately downstream across the state line.

Alternatively, using ADEQ's calculation and Oklahoma's 0.037 mg/L TP water quality standard, one can back-calculate and find that allowing the proposed NACA facility to have a 1.0 mg/L TP effluent limit would entail a necessary background TP concentration at station ARK0006 of 0.014 mg/L or less. Comparing to the TP monitoring data presented by Arkansas' 2004 Integrated Report as cited above (minimum 0.072 mg/L), it is evident that unless the current in-stream TP concentration in the Illinois River at station ARK0006 can be reduced substantially, no additional discharge should be permitted in this part of the watershed. Perhaps if Arkansas were to adopt and implement a water quality standard for TP in the Illinois River watershed of 0.014 mg/l this permit would be feasible.

In addition, ADEQ did not provide a reference for their use of a TP decay rate of 46% from the discharge point to the state line as used in the concentration calculation. OSEQ traced the decay rate to calculations used in the *Response to Comments* presented in the *Final Permit Decision* document for Arkansas PDES # AR0050024 dated November 1, 2004. However, that document does not have a reference for the decay rate(s), either. The decay rate is a key parameter in the concentration calculation. We have previously expressed our misgivings about the use of a decay factor such as this for phosphorus. Phosphorus is an element and does not "go away".

While phosphorus introduced into a stream system may be temporarily stored in sediments or plants, that phosphorus is still available as sediments are re-suspended and plants decompose.

Finally, the ADEQ letter to EPA stated that, "Based on previously submitted information and the critical fact that the sludge form the proposed facility will be disposed of in a landfill and not land applied, there will be no net increase in phosphorus loading to the watershed from this facility." ODEQ disagrees strongly with this statement. ADEQ's letter calculated a 30 lbs/day TP loading from the proposed facility but did not provide information on a reduction of equal amount as a result of the proposed facility. Going back to the *Response to Comments* presented in the *Final Permit Decision* document for Arkansas PDES # AR0050024 dated November 1, 2004, one can find 22 lbs/day of projected TP load reduction due to the disconnection of septic systems based on future population served by the originally proposed Osage Basin Wastewater District facility. Even without considering the fact that ADEQ included many septic systems that are located outside the Illinois River basin in the calculations that resulted in the 22 lbs/day number, one would still find that the newly proposed NACA facility will in fact increase phosphorus loading to Illinois River by at least 8 lbs/day. We also point out that the permit has no requirement that sludge be disposed of in a landfill. There is no prohibition on land application of sludge. In fact, Part II.3 of the draft permit specifies conditions for land disposal of sludge. In any case, this "offsetting reduction" rationale has been rejected by the courts as referenced above.

Thank you for giving the DEQ the opportunity to comment on this important matter. The Oklahoma DEQ requests that we be kept informed on the issues discussed in this letter prior to EPA allowing the permit to go to the public notice stage. If you wish to discuss any aspect of this issue please feel free to call me at 405-702-8188.

Cordially,

Mark Derichsweiler, P.E., Manager
Watershed Planning and Stormwater Permitting Section
Water Quality Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 16 2009

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7003 0500 0003 0875 6136)

Mr. Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality
P. O. Box 8913
Little Rock, AR 72219-8913

Re: Specific Objection to Preliminary Draft Permit
Northwest Arkansas Conservation Authority (NACA)
NPDES Permit No. AR0050024

Dear Mr. Drown:

We have received the additional information you provided December 3, 2008, along with the revised fact sheet and draft permit you developed in response to our November 6, 2008, interim objection to the subject permit. In our interim objection, we stated that the information provided was inadequate to determine whether the draft permit meets the guidelines and requirements of the Clean Water Act and requested additional information. (Please see "EPA's Interim Objection to Preliminary Draft Permit," dated November 6, 2008, which is attached hereto and incorporated herein by reference).

Because EPA believes the issues raised in our Interim Objection remain unresolved, we specifically object to issuance of this permit unless the conditions set out below are satisfied. In particular, EPA believes the effluent limit of 1.0 mg/l for total phosphorus (TP) included in the draft permit does not satisfy the requirements of 40 C.F.R §§ 122.44(d) and 122.4(d) and (i) in that the limit is not stringent enough to meet water quality standards, including State narrative criteria for water quality or applicable water quality standards of all affected states, or to ensure that the discharge will not cause or contribute to a violation of water quality standards for an impaired water body.

Based on available information, EPA considers an effluent limit for TP of 0.1 mg/l to be appropriate for ensuring compliance with applicable water quality standards. However, EPA will withdraw its objection to the permit if the following conditions are satisfied:

1. The term of the permit will be for 5 years. An effluent limit of 1 mg/l total phosphorous (TP) will apply until June 15, 2012. Thereafter, the effluent limit will be set at 0.1 mg/l, unless subsequently reopened and modified based on new data; and,

2. The permit will include appropriate upstream and downstream monitoring requirements for both TP and for Dissolved Oxygen (DO):

In reaching our decision to withdraw this objection if the above conditions are met, we gave consideration to multiple factors. First, we believe there is a strong argument that the discharge from this facility was contemplated, although perhaps not in its current form, in the Statement of Joint Principles and Actions signed by Arkansas and Oklahoma in 2003, in which the States of Arkansas and Oklahoma agreed to include a 1.0 mg/l limit for phosphorous in the permits of specified facilities until the year 2012 as an initial step to protect water quality in the Illinois River Basin. We understand that the proposed 3.6 MGD facility treats discharges from Elfifl and Tontitown, which were previously described in the former Osage Basin permit proposal (0.5MGD); and, the additional 3.1 MGD constitutes additional treatment capacity for the City of Bentonville, addressed in the Statement of Joint Principles and Actions as "the New Bentonville Plant (date unknown)". As noted in the Statement of Joint Principles and Actions, as of 2012 all dischargers to the Illinois River watershed, including NACA, will be required to meet all applicable water quality standards, including narrative standards and the standards of adjacent downstream states.

In addition, of particular relevance is the ongoing water quality study of Osage Creek. This study will provide additional information to establish an in-stream TP target in order to develop a Total Maximum Daily Load (TMDL) for Osage Creek, which EPA considers impaired. If at the conclusion of the study, and in consideration of all other available information, EPA determines, after discussion with ADEQ, that its assessment of impairment continues to be appropriate, or the results are ambiguous, EPA will continue to rely on its determination that Osage Creek is impaired. Alternatively, if all available information indicates Osage Creek is not impaired for TP, then no TMDL for Osage Creek in Arkansas will be needed; however, the study results will still need to be used to establish targets for watershed based planning, including meeting Oklahoma's water quality standards for its scenic rivers. Watershed-based planning for this fast growing area of the State is critical in order to accommodate growth and protect and/or restore water quality throughout the Illinois River and adjacent watersheds, which are already classified by the State as nutrient surplus areas.

In consideration of the foregoing, EPA will withdraw its objection to issuance of this permit while the Osage Creek water quality study is ongoing, under the stipulations described earlier. However, we note that our decision is conditioned upon the completion of this study by the December 2009, deadline committed to by ADEQ. EPA strongly believes that the NACA facility should be required to have TP limits no greater than 0.1 mg/l.

We base this determination on EPA's recommended water quality criteria, as well as, other technical guidance documents. In 2000, EPA published a document entitled *Ambient Water Quality Criteria Recommendations: Information Supporting the Development of State and Tribal Nutrient Criteria, Rivers and Streams in Nutrient Ecoregion XI.* This national document recommended a total phosphorus criterion for streams and rivers, in this aggregate ecoregion, of

0.1 mg/l. EPA national compendium of recommendations for criteria ("1986 Gold Book") states the level of total phosphorus in streams should not exceed 0.1 mg/l to prevent plant nuisance growth. This value coincides with ADEQ's former guideline value for total phosphorus. Please note that a number of facilities in a number of States across the country including Colorado, Virginia, Oregon, New York, Massachusetts, New Hampshire, New Mexico have permit requirements at this level. [1] Therefore, we require a 0.1 mg/l effluent limit to become effective in 2012 in the event a different limit is not supported.

EPA believes that it is in ADEQ's and NACA's best interest to design the treatment plant and future expansions taking into consideration: (1) the phosphorous stream impairment in Osage Creek and in the Illinois River on the Oklahoma side of the State line; (2) the possibility that a phosphorous TMDL could be issued for this watershed in the near future; (3) the downstream state criterion for phosphorus; and, (4) the existence of treatment technologies that can reduce phosphorous levels substantially below 1 mg/l. We also strongly encourage the State to engage in a watershed planning effort to accommodate growth, as well as the possibility of future TMDLs, in this nutrient surplus region.

Our agencies share an interest in promoting the use of Regional wastewater treatment facilities over smaller plants serving individual communities, and we understand the proposed discharge represents a practical pathway towards improving water quality in the Illinois River watershed. However, some of the reasons for regionalization include incorporation of better treatment technologies for pollutants of concern, the economies of scale achievable by larger plants, and the better operation/maintenance of regional plants as compared to smaller plants. Permits for dischargers to the Illinois River and its tributaries issued or re-issued after 2012 will have to reflect the applicable downstream criteria and designated uses in the state of Oklahoma, in addition to Arkansas' criteria and standards. The cumulative impact of the numerous plants in the area will need to be considered and analyzed in order for this to be demonstrated. We strongly encourage the State to engage in a waste load allocation process. Information from your in-stream study will be essential in helping set targets that can be used in a waste load allocation.

Thank you for providing us additional information and a copy of the revised draft permit and fact sheet for review. If you have any questions or concerns regarding our comments, please call me at (214) 665-7101 or have your staff contact Claudia Hosch at (214) 665-7170.

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

[1] *See Advanced Wastewater Treatment to Achieve Low Concentration of Phosphorus, EPA 910-R-07-002* and *Municipal Nutrient Removal Technologies, EPA 832-R-08-006* for additional information on nutrient removal and Facilities that are achieving low P limits.

cc: Teresa Marks, Director, ADEQ
Steve Martin, Deputy Director, ADEQ
Marysia Jastrzebski, P.E., ADEQ
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Dear Randy and Mary,

Thank you and the others for taking the time to meet with us in Dallas on December 7, 2006 to discuss Osage and Spring Creeks, and other water quality related matters in the state of Arkansas. As you know, the Osage and Spring Creek TMDLs for phosphorus are presently under development by EPA. You suggested that a focused investigation of stream uses, phosphorus targets, and nutrient impairments in Osage and Spring Creeks ("study") could be useful to ensuring a sounder and more effective TMDL. You also stated that having undertaken such a study will increase your ability to achieve cooperative implementation of the eventual controls to reduce phosphorus loadings, regardless of the results. You requested two years to complete the study.

We agree that the proposed study, if timely implemented, could assist in the TMDL development process. We also agree that having additional data and analysis will be important to getting stakeholder buy-in and participation in achieving the load reductions needed. However, it is also important to move forward with our water quality work in a reasonable timeframe. Therefore, you have our agreement with the proviso that if steady progress is not maintained on the schedule you propose, EPA will need to move forward with TMDLs absent the additional information and process you suggest.

We discussed some ideas for what this study would include. After consulting with my staff I recommend that you consider the following areas of emphasis when designing the study as it could accomplish multiple objectives:

Use Attainability Analysis – The state may wish to determine if designated uses for these streams are appropriately set, and if there is a need to refine or further define designated aquatic life uses (e.g., fishery use). This could be accomplished through a Use Attainability Analysis (UAA). Designated uses serve as the basis for establishing water quality criteria for dissolved oxygen and other parameters.

Chemical Specific Criteria or Targets - A review of the scientific literature and available data for area least impacted reference streams can be used for developing numeric targets or criteria for phosphorus that would serve to protect water quality in these streams. Using EPA guidance developed for streams and rivers (see http://www.epa.gov/waterscience/criteria/nutrient/guidance/rivers/index.html) we arrived at a preliminary total phosphorus target of 0.06 mg/l (see Enclosure A).

Assessment Methodology Development - ADEQ is presently developing a Nutrient Assessment Methodology (NAM) and will be conducting a pilot project in the Upper Saline River to test indicators and a tiered approach to assessing impairments due to nutrients. The study on Osage/Spring Creeks could serve as another opportunity to test the methodology.

We have enclosed some specific recommendations on a study design for your consideration (see Enclosure B). Also contained in the enclosure is a time line with proposed milestones. This is a logical schedule to allow for multiple water quality sampling events with biological and habitat assessment sampling conducted during critical periods. The workplan and QAPP should be submitted within the next 30 days to keep the project on schedule and allow for sampling to begin this summer.

In addition to conducting the study, you indicated your willingness to evaluate available technology to reduce phosphorus loads to Osage and Spring Creeks and to consider development of a watershed-based plan as a mechanism to minimize phosphorus loads. We strongly support your willingness to take these steps on a parallel track to the study, and believe that such an effort can achieve load reductions in the next couple of years. Guidance is available for developing these plans (see http://www.epa.gov/owow/nps/watershed_handbook/) and we would hope such a plan would be detailed enough to address these specific sub-watersheds.

We would like to review a draft sampling plan or quality assurance project plan for the study. This will establish a framework for further input and discussion. We would also like to receive quarterly progress reports to keep us up to date on the status of the study. We request that you complete and submit a draft study report to us by November 1, 2008 and a Final Report by December 31, 2008. We will periodically review the progress and any milestone products to determine if or when TMDLs should be issued for Osage and Spring Creeks.

In order to progress with water quality improvements in a reasonable time frame, I would like your commitment to complete the study within this two-year timeframe consistent with the process outlined above. Please feel free to contact me or my staff if you have any questions or need assistance.

Sincerely,

Original Signed By Miguel I. Flores

Miguel I. Flores
Director
Water Quality Protection Division

Enclosures

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CROCKER WATSON

Enclosure A
Total Phosphorus Target Development for
TMDL Development in the Illinois River Basin

History - During its review of the 2002 303(d) list, the U.S. Environmental Protection Agency (EPA) determined that Osage Creek (reaches 030 and 930) and Spring Creek (reach 931) in the Illinois River Basin were impaired for total phosphorus. As a result EPA took a listing action adding these to the Arkansas 2002 303(d) list.

Rationale for 2002 Listing Decision

EPA believed that the narrative language from the 1998 Arkansas water quality standards provided some latitude in determining the best approach for applying the nutrient narrative. Because the criteria for most parameters in Arkansas' water quality standards are ecoregion based, EPA did not believe statewide application of the guideline values found in the narrative prior to the 2004 triennial revision was an appropriate approach. The language of the standard recognized that siltation can be an important factor in determining appropriate targets for nutrients. Based on this acknowledgment, it was reasonable for Arkansas to apply a different total phosphorus target to a clear flowing Ozark Highlands stream than to a silt laden stream in the Delta Ecoregion. EPA believed that it was most appropriate to follow the ecoregion approach for evaluation of waters for nutrient impacts to streams.

To do this EPA used the document, *"Physical, Chemical, and Biological Characteristics of Least-Disturbed Reference Streams in Arkansas' Ecoregions"* (ADPCE, 1987). For this document, the Arkansas Department of Environmental Quality (ADEQ, formerly ADPCE) sampled numerous reference stream reaches in all of the established ecoregions. This data was used in establishing water quality criteria for numerous other pollutants, and EPA believed that this information was the most appropriate information available to interpret the state's narrative nutrient standard. In order to establish baseline values for appropriate total phosphorous concentrations in the Ozark Highlands ecoregion, EPA used both the mean and range of all reference stream concentrations for total phosphorous and compared these against available stream concentration values. In the Ozark Highlands ecoregion, the mean phosphorus concentration for eleven sampling events covering six reference streams was 0.05 mg/l, with a range of 0.01 to 0.15 mg/l. Obviously, if the narrative guideline of 0.10 mg/l were applied it would not be sufficiently protective to serve as a reasonable value for assessing impairment. EPA's approach was to compare instream concentrations with the more appropriate ecoregion values in order to determine if there was a meaningful difference. For example, phosphorus concentrations for samples collected on Osage Creek (reach 030) had a mean that was fourteen times greater than the reference sites. EPA determined that this stream was significantly different from the ecoregion values and proposed that this stream be listed. EPA used a weight of evidence approach, considering multiple environmental indicators, which also pointed to the need to list this stream as impaired.

Problem Statement– The Total Maximum Daily Load (TMDL) team is under contract to write total phosphorus TMDL for Osage Creek and Spring Creek in the Illinois River Basin. EPA added these waters to Arkansas' 2002 303(d) list using a "weight of evidence" approach with a

series of parameters that are earmarks of nutrient impairment. Region 6 is responsible for developing the TMDLs for total phosphorus. In December 2004, EPA approved a revision to the Arkansas water quality standards in which the narrative language for the nutrient criteria was modified; specifically, the 0.10 mg/l TP guideline applicable to rivers and streams was removed. In order to write a TMDL, a target concentration is needed. This target could also be used to develop a watershed based plan for the Illinois River. The Monitoring and Assessment Team has been tasked with providing a numeric target for TMDL development that will bring these listed waters into compliance with ADEQ's narrative nutrient standard and ultimately be delisted. The target concentration must also take into consideration downstream uses. After reviewing the literature and available data, the following phosphorus targets are suggested for TMDL development in the Illinois River Watershed. The degree of water quality improvement would increase with each lower value.

1. 0.006625 mg/l – Level III Subecoregion 39 (Ozark Highlands) reference condition criterion (EPA December 2000).

   Data from 175 streams were analyzed. Total Phosphorus ranged from 0.0025 mg/l to 2.145 mg/l. The reference condition criterion, 0.006625 mg/l, is based on the 25th percentile for all seasons' data for a decade.

2. 0.037 mg/l – Oklahoma water quality standard for scenic rivers approved by EPA in 2004.

   EPA approved the 0.037 water quality standard for scenic rivers set by Oklahoma. This is the criterion that should be met at the state line for the Illinois River.

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3. 0.05 mg/l (mean) – based on data collected in 1983/1984 in the Ozark Highlands ecoregion from all six-reference streams.

   EPA used the document, "*Physical, Chemical, and Biological Characteristics of Least-Disturbed Reference Streams in Arkansas' Ecoregions*" (ADPCE, 1987) to establish a baseline value for an appropriate total phosphorus concentration for streams in the Illinois River watershed. For this document ADEQ (formerly ADPCE) sampled six reference stream reaches in the Ozark Highland Ecoregion. The mean phosphorus concentration for eleven sampling events was 0.05 mg/l, with a range of 0.01 to 0.15 mg/l. The data from this document has been used by Arkansas in establishing water quality criteria for numerous other pollutants.

4. 0.064 mg/l – 75th percentile based historical data (September 1990 – June 2002) for Flint Creek, a reference stream in the Illinois River watershed.

   EPA's *Technical Guidance Manual for Developing Nutrient Criteria for Rivers and Streams* recommends using the 75th percentile of a reference population (class of streams) for establishing a reference condition. EPA chose the 75th percentile as the reference condition because reference streams are already acknowledged to be in an approximate ideal state for a particular class of streams. The 75th percentile of the historical data for Flint Creek is a 0.064 mg/l (n=104). The mean for this data set is 0.05 mg/l and the median is 0.06 mg/l.

5. 0.06 mg/l – TMDL target established by Missouri Department of Natural Resources (MDNR) in the development of the Elk River Basin TMDL based on data prior to 1985.

   Because Missouri has a narrative nutrient standard, it was necessary to determine a numeric phosphorus target when writing the TMDL. The approach used by MDNR was to review historical data to determine if there was a natural breakpoint. A review of the historical record showed that 1985 was the beginning of the accelerated phosphorus loading that lead to the listing of eleven stream segments in the Elk River watershed by the MDNR. Therefore, based on data prior to 1985, the total phosphorus target was determined to be 0.06 mg/l. The Elk River Basin is also situated in the Ozark Highland ecoregion.

6. 0.08 mg/l – based on limited data collected in 1983/1984 in the Illinois River watershed from only two reference streams (Spavinaw Creek and Flint Creek) (ADPCE, 1987).

   EPA used the document, "*Physical, Chemical, and Biological Characteristics of Least-Disturbed Reference Streams in Arkansas' Ecoregions*." (ADPCE, 1987) to establish a baseline value for an appropriate total phosphorus concentration for streams in the Illinois River watershed. For this document ADEQ (formerly ADPCE) sampled six reference stream reaches in the Ozark Highland Ecoregion including Spavinaw Creek and Flint Creek. Based on the data only from Spavinaw Creek and Flint Creek, the mean phosphorus concentration for three sampling events was 0.08 mg/l, with a range of 0.01 to 0.15 mg/l. The data from this document (all six reference streams in the Ozark Highlands ecoregion) has been used by Arkansas in establishing water quality criteria for numerous other pollutants.

7. 0.075 mg/l (75th percentile) - based on data collected in 1983/1984 in the Ozark Highlands ecoregion from all six reference streams.

   EPA's *Technical Guidance Manual for Developing Nutrient Criteria for Rivers and Streams* recommends using the 75th percentile of a reference population (class of streams) for establishing a reference condition. EPA chose the 75th percentile as the reference condition because reference streams are already acknowledged to be in an approximate ideal state for a particular class of streams. The 75th percentile of the data for the six reference streams (11 sampling events) in the Ozark Highlands ecoregion is approximately 0.075 mg/l.

8. 0.10 mg/l – Concentration guideline found in the 1998 Arkansas water quality standards (Regulation No. 2) prior to the last standards revision (December 2004); used to help interpret the narrative nutrient standard.

   ADEQ removed the 0.10 mg/l phosphorus guideline for rivers and streams during the last triennial review. EPA approved the revision in December 2004. The narrative nutrient standard was enhanced to include multiple indicators for nutrient impairment (water clarity, periphyton or phytoplankton production, dissolved oxygen values, dissolved oxygen saturation, diurnal dissolved oxygen fluctuations, pH values, and aquatic-life community structure); however, numeric criteria were not provided for any of the indicators. ADEQ is

currently drafting a document, which will include numeric values to explain how to interpret this narrative standard.

While the Gold Book (EPA 1986) does not establish a national criterion for phosphorus, it does provide information for the control of eutrophication stating the following:

– "To prevent the development of biological nuisances and to control accelerated or cultural eutrophication, total phosphates as phosphorus (P) should not exceed 50 ug/L in any stream at the point where it enters any lake or reservoir, nor 25 ug/L within the lake or reservoir. A desired goal for the prevention of plant nuisances in streams or other flowing waters discharging directly to lakes or impoundments is 100 ug/L total P (Mackenthun, 1973). Most relatively uncontaminated lake districts are known to have surface waters that contain from 10 to 30 ug/L total phosphorus as P (Hutchinson, 1957)."

9. 0.10 mg/l – Aggregate Ecoregion 11 recommended criterion for phosphorus (EPA, 2000)

In 2000 EPA published a document *Ambient Water Quality Criteria Recommendations: Information Supporting the Development of State and Tribal Nutrient Criteria, Rivers and Streams in Nutrient Ecoregion XI.* Fourteen aggregate ecoregions were established across the US based on land use, topography, soils, etc. Aggregate Ecoregion 11 (APPENDIX A) is a broad scale ecoregion made up of eight Level III subecoregions spanning numerous states. The national recommended numeric criterion for total phosphorus in streams and rivers in this broad scale ecoregion is 0.1 mg/l.

10. Review of historical data in the Illinois watershed to determine a specific criterion.

Historical data is available from the ADEQ ambient monitoring database for the period of record from September 1990 through August 2002. Sampling stations (ARK06, ARK6A and ARK40) located in the Illinois River are ordered in the table below starting at the state line (ARK06) and moving upstream. ARK41 is a station on the Osage Creek, which is a tributary that enters the Illinois River between Stations ARK6A and ARK40.

Table 1. (next page) gives a statistical summary for total phosphorus data reported in mg/l. The historic background mean total phosphorus concentration in the Illinois River is 0.10 mg/L. The mean total phosphorus concentration doubles to 0.21 mg/l in the Illinois River below its confluence with Osage Creek. The mean concentration in Osage Creek is seven times the background concentration upstream in the Illinois River. It is interesting to note that the mean and median phosphorus concentrations for the two downstream sites in the Illinois River are within 0.1 unit of each other indicating that the data are not skewed.

EPA conducted a study in 2003 on the Illinois River Basin. Figure 3.10 (Appendix B) in the report (Parsons, 2004) supports the information in the table above showing that the Osage Creek watershed (which includes Spring Creek and Osage Creek) is a significant source of phosphorus to the Illinois River. The mean total phosphorus concentration at the state line is

0.19 mg/l; moving upstream, 0.61 mg/l in Osage Creek and 0.11 mg/l in the Muddy Fork prior to its confluence with the Illinois River.

Table 1. Statistical summary of total phosphorus (TP) concentrations measured at select sites in the Illinois River watershed from September 1990 through August 2002.

Site Description	Station	n	Minimum (mg/L)	Median (mg/L)	Mean (mg/L)	Maximum (mg/L)
Illinois River south of Siloam Springs, AR	ARK06	59	0.08	0.23	0.24	0.56
Illinois River near Siloam Springs, AR	ARK6A	55	0.10	0.20	0.21	0.37
Osage Creek near Elm Springs, AR	ARK41	128	0.14	0.59	0.73	2.49
Illinois River near Savoy, AR	ARK40	121	0.03	0.08	0.10	0.45

Total phosphorus data collected from six locations (approximately 15 sampling events) in the Illinois River watershed in 2004 and 2005 is provided in the Table 2 (B.E. Haggard, unpublished data, personal communication on 14 March 2006). The stations are listed in increasing distance from the Oklahoma/Arkansas state line (Appendix C). The mean phosphorus concentration at the state line is 0.12 mg/l compared to 0.06 mg/l upstream of the confluence with Osage Creek. The mean phosphorus concentration in Osage Creek is 0.17 mg/l. While the phosphorus concentrations are reduced from earlier studies at some locations, Osage Creek is still the major contributor of phosphorus to the Illinois River.

Table 2. Statistical summary of total phosphorus (TP) concentrations measured at select sites in the Illinois River Drainage Area (IRDA) from 2004 and 2005 (B.E. Haggard, unpublished data, personal communication on 14 March 2006).

Site Description	Distance from stateline (~km)	Total Phosphorus Concentration Statistics: Minimum (mg/L)	Median (mg/L)	Mean (mg/L)	Maximum (mg/L)
Illinois River at Hwy 59 Arkansas-Oklahoma Border	0	0.05	0.13	0.12	0.21
Illinois River downstream from Osage Creek confluence	15	0.06	0.14	0.13	0.22
Osage Creek upstream from Illinois River confluence	20	0.09	0.18	0.17	0.29
Osage Creek downstream from WWTP effluent discharge	44	0.08	0.13	0.15	0.25

Spring Creek downstream from WWTP effluent discharge	45	0.20	0.49	0.54	1.42
Illinois River upstream from Osage Creek confluence	19	0.02	0.05	0.06	0.15
Illinois River at Savoy upstream from Clear Creek confluence	32	0.02	0.07	0.07	0.17
Clear Creek at Savoy upstream from Illinois River confluence.	32	0.02	0.06	0.07	0.22

Conclusion

While there are numerous possibilities for a phosphorus target in the Illinois River watershed as demonstrated above, EPA believes the most appropriate approach is to set a specific target based on the historical background data. Therefore, the appropriate target for phosphorus at the confluence of Osage Creek with the Illinois River is 0.06 mg/l. This site-specific target is reflective of reference stream conditions in the Illinois River watershed based on the 75th percentile of long term historical data (September 1990 – June 2002) for Flint Creek. Furthermore, recent water quality data ~~(2004/2005)~~ collected in the Illinois River upstream of Osage Creek averages 0.06 mg/l TP (see Table 2). This target is in agreement with the site-specific TMDL phosphorus target established by the Missouri Department of Natural Resources in the development of the Elk River Basin TMDL. The Elk River Basin extends into Benton County in northwest Arkansas and is also located in the Ozark Highlands ecoregion. Monitoring and assessment of total phosphorus and other environmental indicators indicative of nutrient enrichment should be conducted before, during and after TMDL implementation to gauge the appropriateness of this proposed target.

References

ADEQ. February 2006. Surface Water Quality Monitoring Stations Data Files. Arkansas Department of Environmental Quality, Little Rock, Arkansas. ADEQ website: http://www.adeq.state.ar.us/techsvs/water_quality/monitors.asp

ADEQ. 2004. *Regulation No. 2: Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas.* Arkansas Department of Environmental Quality, Little Rock, Arkansas.

ADEQ. 1998. *Regulation No. 2: Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas.* Arkansas Department of Environmental Quality, Little Rock, Arkansas.

ADPCE. June1987. *Physical, Chemical, and Biological Characteristics of Least-Disturbed Reference Streams in Arkansas' Ecoregions, Volume I: Data Compilation.* Arkansas Department of Pollution and Ecology, Little Rock, Arkansas.

Haggard, B. E.. (personal communication, March 14, 2006)

MDNR. January 2004. *Total Maximum Daily Load (TMDL) for the Elk River Basin, McDonald, Barry and Newton Counties, Missouri, Benton County, Arkansas.* Approved March 26, 2004. Missouri Department of Natural Resources, Water Pollution Control Program. MDNR website http://www.dnr.mo.gov/wpscd/wpcp/tmdl/elk-r-final-tmdl.pdf

OWRB. July 2005. *Oklahoma Water Resources Board Rules Title 785, Chapter 45 Oklahoma Water Quality Standards.* Oklahoma Water Resources Board. OWRB website http://www.owrb.state.ok.us/util/rules/pdf_rul/Chap45.pdf

Parsons and the University of Arkansas. November 2004. *Final Report – Volume 1, Water Quality and Biological Assessment of Selected Segments in the Illinois River Basin and Kinds River Basin, Arkansas.* Contract #68-C-02-111, Task order 0005. EPA website: http://epa.gov/earth1r6/6wq/artmdl.htm.

U.S. EPA. 2006. *History of EPA's Criteria Recommendations for Phosphorus* – report prepared by Melinda Nickason, Region 6, U. S. Environmental Protection Agency.

U.S. EPA. 2003. *EPA Rational for Making Listing Decisions* by Jessica Franks. U.S. Environmental Protection Agency. EPA website http:// epa.gov/earth1r6/6wq/artmdl.htm.

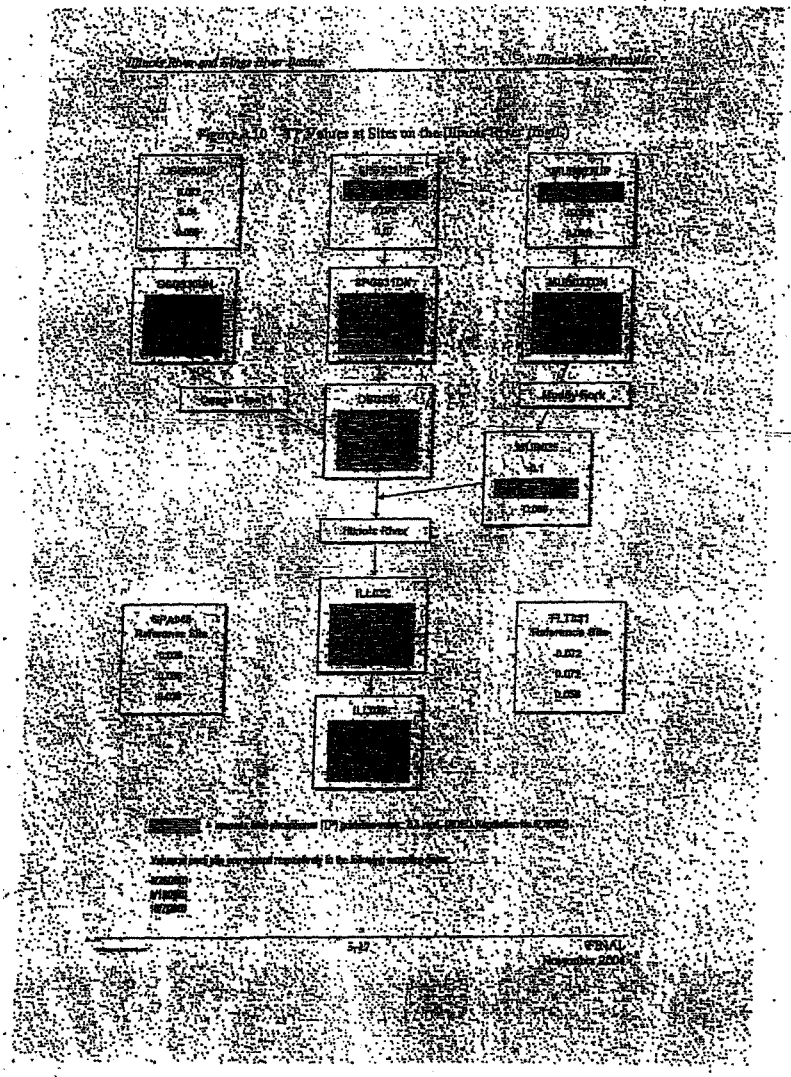
U.S. EPA. December 2002. *Ambient Water Quality Criteria Recommendations: Information Supporting the Development of State and Tribal Nutrient Criteria, Rivers and Streams in Nutrient Ecoregion XI.* U.S. Environmental Protection Agency, Washington, D.C. EPA 822-B-00-020.

U.S. EPA. July 2000. *Nutrient Criteria Technical Guidance Manual: Rivers and Streams.* U.S. Environmental Protection Agency, Washington, D.C. EPA 822-B-00-002.

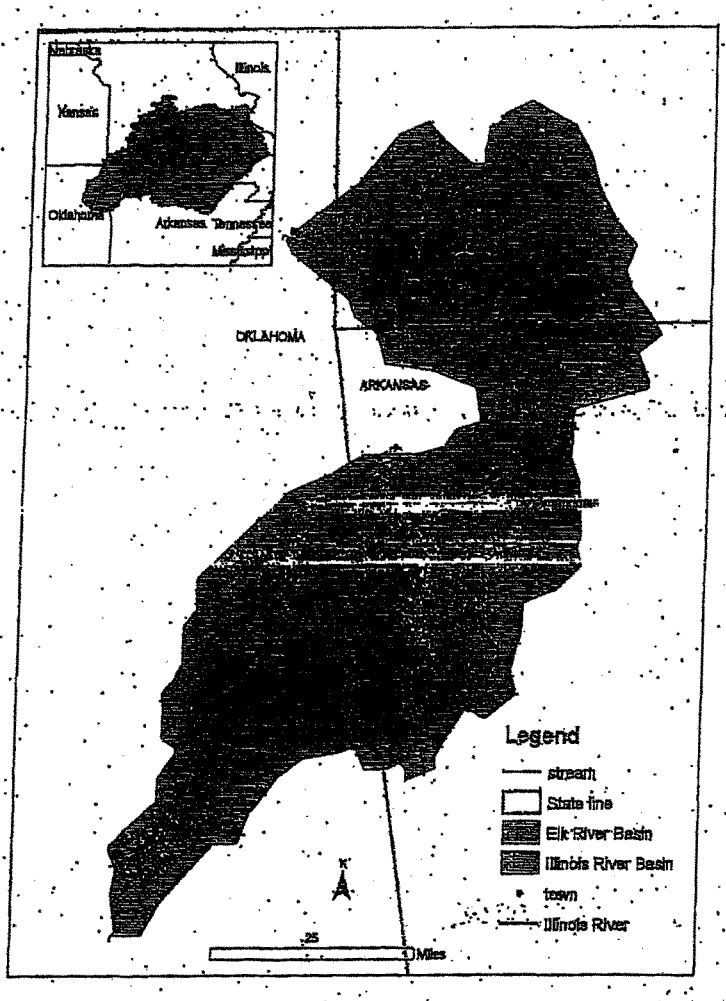
U.S. EPA. 1986. *Quality Criteria for Water* (the "Gold Book"). U.S. Environmental Protection Agency, Office of Water Regulations and Standards, Washington, D.C. EPA -440/5-86-001. USGPO #955-002-00000-8.

APPENDIX A: Map of Aggregate nutrient Ecoregion 11, a large-scale multi-state ecoregion.

APPENDIX B: Figure showing the phosphorus concentrations at various locations throughout the Illinois River basin. Starting at the state line, the phosphorus concentration increases as one moves upstream and then decreases after the confluence of the Illinois River with Osage Creek.



APPENDIX C: Mean total phosphorus concentrations measured at select sites in the Illinois River basin from 2004 and 2005 (B.E. Haggard, unpublished data, personal communication on 14 March 2006). Also shown are the reference condition (12 years of data) at Flint Creek and the Elk River basin TMDL target at Tiff City.



Enclosure B
EPA Recommendations for Sampling Program for the Osage Creek Watershed
and Proposed Time Line

Time Frame: January 2007 – December 31, 2008

Location: Osage Creek (Reaches 930 and 030) and Spring Creek (reach 931) plus reference stream (possibly Flint Creek, reach 031).

Objectives: Conduct a comprehensive water quality study in the Osage Creek watershed to: 1) determine what designated uses are attainable, 2) establish nutrient targets that would be protective of the stream uses and 3) assess water quality and biological integrity using a multi-level weight of evidence approach.

Study Design

Sampling Locations: At a minimum stations should be established upstream of each WWTP and a short distance downstream, on Osage Creek at the confluence of Spring Creek, and on Osage Creek at the confluence with the Illinois River. A reference station should also be established on a least-disturbed stream.

Review Scientific Literature: Review scientific literature to evaluate chemical specific bench marks for phosphorus and weight of evidence assessment of nutrient impacts. Consider ADEQ draft nutrient assessment methodology components (see pilot project QAPP).

Review of Historical Data: Compile historical data looking at total phosphorus, ortho-phosphate, nitrate+nitrite nitrogen, ammonia, pH, TSS, TDS, TOC, turbidity, dissolved oxygen (mg/L) and dissolved oxygen percent saturation. Of particular interest is data collected when the ambient water temperature is 22°C or greater. Identify seasons when nutrients are more pronounced in the watershed.

Water Quality Sampling: Collect ambient water samples monthly from June 2007 through August 2008. Analyze for total phosphorus, ortho-phosphate, total Kjeldahl nitrogen, nitrate-nitrite nitrogen, ammonia nitrogen, turbidity, total dissolved solids, total suspended solids, total carbon, benthic chlorophyll a and water column chlorophyll a.

Field Parameters and Observations: In situ collection of pH, temperature, dissolved oxygen, conductivity in addition to stream flow, climatic observations, and photographs.

Dissolved Oxygen Diurnal Sampling: Conduct a minimum to two 72-hour diurnal samples using a multi-probed datasonde to collect dissolved oxygen (mg/L), pH, temperature, conductivity, and dissolved oxygen percent saturation. Collections will take place during the critical season, preferably late July to mid-September.

Habitat Characterization: Habitat surveys should be conducted at the same time biological data is collected using EPA's Rapid Bioassessment Protocol. Parameters to be measured include but

are not limited to epifaunal substrate/protective cover, sediment deposition, channel flow status, channel alteration, bank stability, vegetative protection and riparian vegetative zone width, frequency of riffles, velocity/depth regime, pebble counts, substrate embeddedness, % canopy, potential nutrient sources, bank stability, riparian habitat, vegetative protection, percentage of algal cover, algal filament length, periphyton thickness, pebble counts.

Biological Sampling: Fish and macroinvertebrate sampling should take place a minimum of 2 times during the critical low flow season (June – August). The two sampling events may take place in a single summer or may be spread over two summers to measure inter-annual variability. Sample collections for other times may be included in addition to the summer sampling. Macroinvertebrate and fish sampling methodology should follow the protocol used in EPA's 2003 study of the Illinois River which is consistent with methods used by the ADEQ. Using the same methodology will yield data that is comparable to historical biological collections dating back to 1963. A minimum of 300 benthic organisms should be identified to the minimum practical levels for taxonomic resolution from each composite sample. At a minimum, a suite of 16 metrics (total number identified, additional invertebrates, total number in sample, total taxa, taxa richness, dominant taxa, EPT taxa, EPT index, EPT/chironomids + EPT, scraper abundance, filter feeder abundance, chironomidae abundance, scrapers/scrapers + filter feeders, Hilsenhoff biotic index and community loss index) should be calculated for each macroinvertebrate sample. For fish samples, at a minimum effort, catch rate, total numbers, total number of species (taxa), number of sensitive species and individuals and their percentages, number of primary TFL and percentages, number of key individuals and percentages and diversity indices should be calculated.

Time Line

Work Plan/QAPP: Submit to EPA by March 31, 2007

Sampling: June 2007 through August 2008 following study design described above

Draft report: November 1, 2008

Final report: December 31, 2008

January 27, 2009

References Cited in Support of 0.1 mg/l as the Total Phosphorus Permit Limit for Northwest Arkansas Conservation Authority WWTP:

1. *"Quality Criteria for Water 1986"*, May 1, 1986, EPA440/5-86-001.

http://www.epa.gov/waterscience/criteria/library/goldbook.pdf

2. *"Ambient Water Quality Criteria Recommendations - Information Supporting the Development of State and Tribal Nutrient Criteria - Rivers and Streams in Nutrient Ecoregion XI, The Central and Eastern Forested Uplands including all or parts of the States of Pennsylvania, Ohio, West Virginia, Virginia, Tennessee, North Carolina, Kentucky, Alabama, Georgia, Missouri, Arkansas, Oklahoma, South Carolina, New Jersey, New York and the Tribes within the Ecoregion"*, December 2000, EPA 822-B-00-020.

http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/rivers/rivers_11.pdf

Phosphorous Treatment Technologies:

1. *"Advanced Wastewater Treatment to Achieve Low Concentration of Phosphorus"*, April 2007, EPA 910-R-07-002.

http://yosemite.epa.gov/r10/water.nsf/Water+Quality+Standards/AWT-Phosphorus/$FILE/AWT+Report.pdf

2. *"Municipal Nutrient Removal Technologies Reference Document"*, Volume 1 – Technical Report and Volume 2 – Appendices, September 2008, EPA 832-R-08-006.

http://www.epa.gov/OWM/mtb/mnrt-volume1.pdf

http://www.epa.gov/OWM/mtb/mnrt-volume2.pdf

Some Examples of Facilities with 0.1 mg/l or lower NPDES Permit Limits for Phosphorus:

Facility Name and Location	NPDES Permit No.	Capacity	NPDES Permit Limitation for Phosphorus	Permit / Fact Sheet Location or URL address
Westborough, MA	MA0100412	7.68 mgd	0.1 mg/l	http://epa.gov/region1/npdes/permits/ma0100412permit.pdf
Woonsocket, RI	RI0100111	16.0 mgd	0.1 mg/l	http://epa.gov/region1/npdes/permits/2008/finalri0100111permit.pdf
Delhi, NY	NY0020265	0.82 mgd	0.11 mg/l	EPA Region 2
Upper Occoquan, VA	VA0024988	42 mgd	0.10 mg/l	EPA Region 3
Pinery WWRF Parker, CO	CO0041092	2 mgd	0.05 mg/l	EPA Region 8
Snyderville Basin WRD, UT	UT0020001	4 mgd	0.1 mg/l	EPA Region 8
Clean Water Services Rock Creek WWTP, OR	OR0029777	39 mgd	0.1 mg/l	EPA Region 10
Ruidoso, NM	NM0029165	2.6 mgd	0.1 mg/l	ftp://ftp.nmenv.state.nm.us/www/swqb/NPDES/Permits/NM0029165-Ruidoso-RuidosoDowns.pdf
Mora National Fish Hatchery, NM	NM0030031	0.5 mgd	0.03 mg/l	ftp://ftp.nmenv.state.nm.us/www/swqb/NPDES/Permits/NM0030031-Mora.pdf

Major NPDES Permits in Northwest Arkansas' Illinois River Watershed and Relative Expiration Dates with regard to the "*Joint Principles and Actions*" expiration of 2012.

Facility	NPDES Permit No.	Issuance Date	Effective Date	Expiration Date	Permit / Fact Sheet location or URL address
Fayetteville	AR0020010	04/30/2006	06/01/2006	05/31/2011	http://www.adeq.state.ar.us/home/pdssql/pds.asp type in NPDES Permit No.
Fayetteville - West	AR0050288	11/30/2005	12/01/2005	11/30/2010	Ditto
Rogers	AR0043397	01/31/2006	03/01/2006	02/28/2011	Ditto
Siloam Springs	AR0020273	09/30/2007	10/01/2007	09/30/2012	Ditto
Springdale	AR0022063	02/29/2004	04/01/2004	03/31/2009	Ditto

Enclosure H.

Please provide information concerning EPA's review of State-issued NPDES permits.

40 C.F.R. § 123.44 sets out the process for EPA review of State-issued NPDES permits, including the specific time-frames and conditions under which EPA may object to such permits. Under that section, EPA has up to 90 days from receipt of a proposed State permit to provide comments, recommendations or an objection to the permit. (As allowed by 40 C.F.R. § 123.44(j), EPA and ADEQ agreed in the Memorandum of Agreement (MOA) signed upon authorization of the Arkansas NPDES program that EPA would review draft instead of proposed permits. However, the requirements for EPA's review otherwise remain the same). Pursuant to 40 C.F.R. § 123.44 (d)(2), EPA may, within 30 days of receipt of the proposed permit, request additional information if the information provided is insufficient to determine whether the permit meets the requirements of the Clean Water Act (CWA). Such a request constitutes an interim objection to issuance of the permit, and the full period of time specified in the MOA for EPA's review recommences once EPA has received such information.

Within 90 days of receipt of EPA's objection, the State or any interested person may request a public hearing on the objection. 40 C.F.R. § 123.44 (e) states that such a public hearing will be held if requested by the State or if warranted by significant public interest based on requests received. Following the public hearing, EPA must notify the State of its decision to reaffirm the original objection, modify the objection or withdraw the objection. 40 C.F.R. § 123.44 (g).

If no public hearing is held, the State has 90 days from receipt of EPA's objection to resubmit to EPA a permit revised to meet EPA's objection. If the State does not resubmit a permit revised to meet EPA's objection within 90 days, EPA may issue the permit. If a public hearing on the objection is held, and EPA does not withdraw its objection following the hearing, the State has 30 days from the date of EPA's notification of its decision to resubmit to EPA a permit revised to meet EPA's objection or modified objection. If the State does not resubmit a permit revised to meet EPA's objection or modified objection within 30 days, EPA may issue the permit. 40 C.F.R. § 123.44 (h)(1) and (2). 40 C.F.R. § 123.44 (h)(3) provides that "[e]xclusive authority to issue the permit passes to EPA when the times set out in this paragraph expire."

Please provide information regarding the NPDES permit appeals process.

The appeals process for NPDES permits is governed by § 509 of the CWA and 40 C.F.R. § 124.19. 40 C.F.R. § 124.19 sets out the first step in the appeals process. Pursuant to that section, any person who filed comments on a draft NPDES permit or participated in the public hearing may, within 30 days after issuance of the permit, petition the Environmental Appeals Board to review any condition of the permit decision. The 30-day period within which to file the appeal begins with service of notice of EPA's action, unless a later date is specified in that notice. Section 124.19 specifies the information that must be included in a petition for review and provides that the Environmental Appeals Board must issue an order granting or denying the petition for review within a

reasonable time following the filing of the petition. If review is denied, the permit becomes final agency action. If review is granted, public notice will be issued, including a briefing schedule and a statement that any interested person may file an amicus brief.

40 C.F.R. § 124.19 (e) provides that filing a petition for review with the Environmental Appeals Board is a prerequisite to the seeking of judicial review of the final agency action. For purposes of judicial review, final agency action occurs when a final NPDES permit is issued by EPA and the agency review procedures detailed in 40 C.F.R. § 124.19 are exhausted. 40 C.F.R. § 124.19 (f).

Once final agency action has occurred, § 509 of the CWA provides that review of EPA's action in issuing or denying a permit under § 402 of the CWA "may be had by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts business which is directly affected by such action upon application by such person." CWA § 509 (b)(1). Pursuant to § 509 (b)(1), any appeal must be made within 120 days from the date of the issuance or denial of the permit, unless the appeal is based solely on grounds that arose after the 120th day.

Please explain the reference to permits issued in the year 2012 and beyond in the Statement of Joint Principles and Actions.

It was EPA's understanding when the Statement of Joint Principles and Actions was drafted, and it continues to be EPA's understanding now, that the agreement was intended to act as a complement to the 10-year compliance schedule accompanying Oklahoma's 0.037 mg/L criterion for phosphorous in its six (6) scenic rivers. Oklahoma's 0.037 mg/L criterion was modified by a compliance schedule provision allowing point source dischargers up to 10 years from July 1, 2002, or until June 30, 2012, to come into compliance with permit limits based on the criterion. As EPA explained in its Summary of Decision approving Oklahoma's criterion, EPA believed allowing the point source dischargers specified in the Statement of Joint Principles and Actions to initially reduce their phosphorous effluent concentrations through permit limits of 1 mg/L total phosphorous was allowable based on Oklahoma's .037 mg/L criterion as modified by the compliance schedule, and that agreeing to limit the specified point source discharges in this manner should result in reasonable further progress toward achieving the 0.037 mg/L instream goal by the June 30, 2012 deadline. [Summary of Decision, EPA Actions on the July 1, 2002, Revisions to the Oklahoma Water Quality Standards]. However, as EPA stressed in that document, the deadline for full implementation of the criterion is June 30, 2012. As of that date, the CWA mandates that all point source dischargers in both Oklahoma and Arkansas must comply with applicable water quality standards.

EPA believes the phrase "permits ....issued in the year 2012 or beyond" is not inconsistent with our understanding of the agreement. The language was included as a reminder to both parties that the additional time provided to dischargers to come into

compliance with Oklahoma's .037 mg/L criterion for phosphorous extended only until the year 2012. In 2012 and beyond, all point source dischargers would be required to meet limits designed to achieve compliance with any applicable downstream State water quality standards.

JOHN BOOZMAN
3RD DISTRICT, ARKANSAS
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House of Representatives
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SUBCOMMITTEES:
RANKING MEMBER, ECONOMIC OPPORTUNITY

February 7, 2009

Mr. Miguel Flores
Director, Water Quality Protection Division
U.S. Environmental Protection Agency – Region VI
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Dear Mr. Flores:

I am writing to request additional information on the EPA discharge permit process for the Northwest Arkansas Conservation Authority (NACA). Thank you for taking the time to assemble your team and visiting with me on the phone on January 22, but I still have several questions.

In a January 16, 2009 e-mail to my office, EPA cited "federal water quality criteria published in 1986 that are lower than 1 mg/l" as a "rationale for determining that 1 mg/l is insufficient to attain water quality standards." Would you please provide me with a copy of this federal water quality criteria?

Also, according to the January 16 e-mail, "EPA is willing to consider a permit limit of 1mg/l until June 15, 2012, provided the permit clearly provides that the 0.1mg/l limit becomes effective after that date." I am concerned that, as a result of this decision, NACA is being treated differently than the other parties to the Statement of Joint Principles and Actions between the states of Arkansas and Oklahoma.

In late December, my staff sent EPA Region VI the following question: "If EPA chooses to require a more stringent standard, is it disregarding the Statement of Joint Principles between the states of Arkansas and Oklahoma; and if so, why? Is EPA disregarding the Statement of Joint Principles between the states of Arkansas and Oklahoma in any other way?"

The EPA written response was as follows:

> To the contrary, EPA is supportive of the Statement of Joint Principles and Actions. It is for this reason that we are willing to support what is in essence a 3-year compliance schedule for this facility, despite the fact that not everyone agrees that the NACA facility is the new Bentonville facility envisioned by the agreement. However, it is important to note that the 1 mg/l limit for phosphorous agreed to in the Statement of Joint Principles

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4943 OLD GREENWOOD ROAD, SUITE 1
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> and Actions was never intended to be the final word on water-quality based permit limitations, even for the covered facilities. The 1 mg/l limit was intended as a reasonable first step toward meeting applicable water quality standards. The document itself clearly specifies that all dischargers will be required to meet phosphorous limits stringent enough to meet applicable water quality standards in the year 2012 and beyond. Although EPA believes, based on current data, that 0.1 mg/l represents the phosphorous limit "stringent enough to meet applicable water quality standards," we are certainly open to revisiting that number based on information from the ongoing Osage Creek study.

My understanding is that the Statement of Joint Principles and Actions specifically lists 5 facilities that are to be permitted to discharge phosphorus at 1 mg/l "on a normal (5) year reissuance cycle" until the time of the first 5 year renewal that would occur "in the year 2012 or beyond." The 5 facilities listed include a new facility for Bentonville. The NACA facility will serve as the Bentonville facility in question. Bentonville is not planning to build a single-city treatment plant, and has agreed to work in cooperation on the NACA project. Additionally, Bentonville will initially contribute up to 85% of the waste water to be treated at the facility. Several years ago, during a meeting I organized for NACA at the EPA Headquarters in Washington, EPA expressed strong support for Bentonville's decision to enter into this collaboration. Furthermore, Bentonville provided the property where they would likely have built their single-city treatment plant to NACA for its use.

My understanding is that the Statement of Joint Principles and Actions makes no mention of a 0.1 mg/l limit after 2012 but instead says permits reissued thereafter "must include phosphorus limits stringent enough to meet applicable water quality standards." How is EPA's position to allow the 1 mg/l limit only until June 15, 2012 not contrary to the normal 5 year reissuance cycle provision of the Agreement? How is the 0.1 mg/l limit thereafter not contrary to the science-based phosphorus limit provision of the Agreement?

Additionally, in late December, my staff sent EPA Region VI the following series of questions: "Has EPA Region VI approved any other permits with 1 mg/l limits for other discharge points in the watershed since the time of the agreement? My understanding is that such permits have been approved for Rogers, Springdale, Siloam Springs, Fayetteville, and Bentonville? Are there any others? What distinguishes the approval of these other permits from the current permit application from NACA?"

The EPA written response was as follows:

> EPA is committed to fulfilling its Clean Water Act responsibilities, while being mindful of the importance of interstate agreements such as the Statement of Joint Principles and Actions. Facilities enumerated in the Statement of Joint Principles have been approved with 1 mg/l Total Phosphorous effluent limits consistent with that agreement. It is important to note that all of these facilities are existing facilities whereas the NACA facility is a new facility. As such, it can be designed and constructed to

> better performance standards given that much lower limits could likely be required post 2012 to demonstrate compliance with the Oklahoma standard at the state line. Any new facility in NW Arkansas that proposes to discharge to impaired waters will likely have to comply with lower effluent limitations than currently allowed for under the Statement of Joint Principles and Actions in order to demonstrate compliance with applicable water quality standards in both states. You should also be aware that after 2012, existing facilities may have to comply with lower effluent limitations at the time of permit renewal for water quality reasons. And, as mentioned above, EPA is aware of permitted facilities in several States and Regions that are already required to meet Phosphorous effluent limits much lower than 1 mg/l.

I want to make sure that I understand this response. The response states that "all of these facilities are existing facilities whereas the NACA facility is a new facility." This is factually incorrect. One of the facilities that was enumerated in the Statement of Joint Principles and that was approved for a 1 mg/l standard is a new facility. Furthermore, to my knowledge, the Statement of Joint Principles and Actions makes no distinction between existing and new facilities. As you know, it is technically feasible to increase the phosophorus limit in either a new or existing facility. Does EPA normally impose different effluent limits on treatment plants based solely on whether they are new or existing?

Also, the response states that "...after 2012, existing facilities may have to comply with lower effluent limitations at the time of permit renewal for water quality reasons." Please provide a written explanation of the various regulatory processes (state and federal) through which lower limits might be imposed after 2012. The reason I ask for this clarification is that at some points during our conversation I thought I understood you to say that permit renewal decisions would be the sole decision of the state, while at other times it seemed that you referenced a more significant EPA role. In providing this written explanation, please alert me to any distinctions in the renewal process for existing facilities as opposed to initial renewals for new facilities.

As you stated during our January 22 conversation, completion of the Osage Creek Water Quality study (funded by our local communities) is anticipated this year. From EPA's perspective, what would be the be negative consequences of waiting until this study is complete and other ongoing efforts to improve the watershed continue to take effect before making a determination regarding what the phosphorous limits should be post-June 15, 2012?

Additionally, I want to state clearly the two requests I made verbally on January 22: (1) Would you please send me a list of other wastewater treatment plants that have been issued discharge permits requiring phosphorous effluent limits of 0.1 mg/l?, and (2) Would you please provide me with any scientific studies, background information, correspondence, or other data that you have used to justify a 0.1 mg/l limit as EPA's interpretation of the Arkansas's narrative criterion generally, and in particular to justify a 0.1 mg/l limit on the NACA facility in particular? In providing me the list of other

wastewater treatment plants that have been issued discharge permits requiring phosphorous effluent limits of 0.1 mg/l, please be sure to designate which of these plants have effluent limits that were negotiated in cooperation with the respective state environmental agencies, and which of these plants have effluent limits that were developed exclusively by EPA. I ask for this distinction because my understanding is that in some states (e.g. New Mexico) EPA has exclusive authority to issue these permits, while in other states (e.g. Arkansas) the state environmental agencies play a broader role.

Finally, I am requesting that your response state, in numeric terms, the degree to which the imposition of the 0.1 mg/l effluent limit on the NACA facility would improve water quality in the watershed.

Let me be clear, I have worked hard to support efforts to reduce excessive nutrients in the Illinois River Basin. I have worked with the Arkansas Delegation to secure funding for EPA STAG Grants to assist my constituents with the cost of the NACA project. I have strongly supported efforts through the U.S. Department of Agriculture and the Arkansas Natural Resources Commission to bring a USDA Conservation Reserve Enhancement Program (CREP) project that will assist land owners in implementing best management practices to reduce non-point source pollution in the Illinois River and its tributaries. At the same time, I believe that during this time of economic hardship for many families, we must also do all we can to limit increases in the cost of basic utilities, like water and sewer. Ultimately, I am disappointed that the process has necessitated this letter.

I know the elected leaders of NACA's member communities are committed to doing their part to reduce the nutrient load in the Illinois River Basin. However, like me, they are concerned about the economic hardships that would be caused by a decision to disregard key components of the agreed-upon Statement of Principles and Actions, particularly for our vulnerable and poorer citizens on fixed incomes.

Please fax your response to this letter to 479-725-0408 and mail a hard copy to me at:

Congressman John Boozman
C/O: Philip Moore
213 W. Monroe, Suite K
Lowell, AR 72745

If you have any questions, please feel free to contact my Policy and Projects Director, Philip Moore at philip.moore@mail.house.gov or 479-725-0400. Thank you for your responsiveness, your hard work, and your attention to this letter.

Sincerely,

John Boozman,
Member of Congress

JB:pm

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
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FEB 2 6 2009

The Honorable John Boozman
Member, United States
House of Representatives
213 West Monroe, Suite K
Lowell, AR 72745

Dear Congressman Boozman:

Thank you for your letter of February 7, 2009, to our Water Quality Protection division director Miguel Flores concerning Northwest Arkansas Conservation Authority (NACA).

In your letter, you requested information discussed in our January 22, 2009, conference call, which my staff provided in a letter dated February 5, 2009. This information included correspondence and resources providing the rationale for the proposed 0.1 mg/l total phosphorus (TP) limit, a list of sample facilities across the country that have been issued discharge permits requiring phosphorus limits of 0.1 mg/l, as well as other documents and resources requested in the call. My staff has compiled the information enclosed here to address additional concerns expressed in your letter of February 7, 2009.

Thank you for your support and interest in helping protect the environment. I hope you find the information we have provided adequate. Should I be able to assist you further, please call me at (214) 665-2100, or your staff may contact LaWanda Thomas of my staff at (214) 665-7466 or Cynthia Fanning at (214) 665-2142.

Sincerely yours,

Lawrence E. Starfield
Acting Regional Administrator

Enclosure

cc: Teresa Marks
Arkansas Dept. of Environmental Quality

John Sampier
Northwest Arkansas Conservation Authority

Additional Information for Rep. John Boozman on the Northwest Arkansas Conservation Authority (NACA)

You expressed concern that NACA is being treated differently than other parties to the Statement of Joint Principles and Actions signed by the States of Arkansas and Oklahoma in 2003 ("the Agreement").

NACA is being treated no differently than the other parties to the Agreement. Throughout our discussions with the two States prior to the signing of the Agreement and in our Summary of Decision approving Oklahoma's 0.037 mg/l criterion for phosphorus, EPA emphasized the deadline for full implementation of the criterion is June 30, 2012. As of that date, the Clean Water Act (CWA) mandates that all point source dischargers in both Oklahoma and Arkansas comply with applicable water quality standards. This mandate applies to NACA, as well as the other dischargers specifically covered by the Agreement. Furthermore, it is consistent with our long-standing procedures for permitting a new discharger proposing to discharge into impaired waterbodies.

It is true that permits have been issued to several of the facilities covered by the Agreement with the agreed upon phosphorus limit of 1 mg/l for the full five (5) year term of the permit. However, this was possible only because the full five (5) year term of the permit was within the 10-year compliance schedule period ending on June 30, 2012. Any permits that will run beyond June 30, 2012, such as the one proposed for NACA, will be required to include effluent limits that comply with all applicable water quality standards as of that date.

Although EPA is supportive of the Agreement signed by the two States as a positive step toward achieving compliance with water quality standards in the shared Oklahoma Scenic Rivers Watersheds, the Agreement does not supersede the requirements of the CWA. Under the CWA and 40 C.F.R. Part 122, National Pollutant Discharge Elimination System (NPDES) permits must include limitations sufficient to "[a]chieve 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 Arkansas Department of Environmental Quality (ADEQ) has not demonstrated that a limit of 1 mg/l TP for NACA is sufficient to achieve water quality standards.

You also asked about the significance of NACA being a new facility.

40 C.F.R. § 122.4 specifically speaks to permits issued to new facilities, such as NACA, which propose to discharge to impaired water bodies. Section 122.4(i) provides that "[n]o permit may be issued ... [t]o a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards." Section 122.4 provides an exception for discharges into water bodies for which a Total Maximum Daily Load (TMDL) assessment has been performed, if the new discharger can demonstrate that 1) there are sufficient remaining load allocations to allow for the discharge, and 2) the existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable

water quality standards. 40 C.F.R. § 122.4(i)(1) & (2). However, at this time, there is no TMDL applicable to NACA's proposed discharge.

Because there is no TMDL, EPA interprets 122.4(i) to allow the issuance of permits to facilities, such as NACA, that propose to discharge a pollutant of concern into a water body listed as impaired only if the permit includes effluent limitations sufficient to meet water quality standards end-of-pipe, or if the discharger demonstrates that other pollutant source reductions will offset its discharge and result in a net decrease in loadings. If either of these conditions is met, EPA feels comfortable arguing the discharge will not cause or contribute to a violation of water quality standards. With regard to NACA, which is required by the CWA to comply with Arkansas' narrative standard for phosphorus, as well as Oklahoma's 0.037 mg/l phosphorus criterion, EPA has determined that, based on available information, an effluent limit of 0.1 mg/l would meet water quality standards at the end-of-pipe.

You asked for an explanation of the role of EPA vs. the State agencies in permit issuance and reissuance.

Under Section 402 of the CWA, states may be authorized to implement the NPDES permitting program for dischargers within their jurisdiction. In Region 6, the States of Arkansas, Oklahoma, Louisiana and Texas have NPDES authorization. EPA still implements the program in New Mexico (Region 6), Idaho, Massachusetts, New Hampshire and Washington, DC. Once a state receives NPDES authorization, the state has exclusive authority to issue permits. In its oversight role, EPA reviews proposed state permits to ensure compliance with the CWA. If EPA determines that a proposed state permit does not comply with the requirements of the CWA, EPA may object to the permit. The process for EPA's objection to state permits is explained in detail in our previous correspondence with your office. However, generally, if the state does not resubmit a permit modified to comply with EPA's objection, exclusive authority to issue the permit transfers to EPA.

This division of authority between the federal and state governments applies to reissuance of permits as well. NPDES-authorized states have exclusive authority to reissue permits to facilities whose previous permits have expired, and EPA reviews these permits to ensure compliance with the CWA.

However, regardless of whether EPA or the authorized state issues or reissues the permit, the CWA requires permit limits to be technology or water quality-based in accordance with applicable regulations. The 1 mg/l phosphorus limit agreed to by the States of Arkansas and Oklahoma in the Statement of Joint Principles and Actions is neither a water quality nor a technology-based limit. It is a limit negotiated by the two States as an initial step toward achieving water quality goals, which was allowable only because of the 10 year compliance schedule included in Oklahoma's water quality standard for phosphorus. That compliance schedule expires on June 30, 2012, and as of

that date, all dischargers, even those specifically covered by the Agreement, are required to comply with applicable water quality standards.

You asked what negative consequences would ensue if EPA waited until the Osage Creek Water Quality Study is completed before determining the appropriate water quality limit post-2012.

The CWA and 40 C.F.R. Part 122 clearly provide that no permit may be issued when the conditions of the permit do not provide for compliance with the requirements of the CWA or regulations promulgated under the CWA, do not ensure compliance with the applicable water quality requirements of all affected states, or, with regard to permits for new discharges, if the proposed discharge will cause or contribute to the violation of water quality standards. 40 C.F.R. § 122.4(a)(d) and (i). EPA believes there is sufficient data to demonstrate that a phosphorus limit of 0.1 mg/l is required for NACA in order for the facility's discharge to meet applicable water quality standards, and that the CWA requires the facility to meet those standards upon the June 30, 2012, expiration of the 10-year compliance schedule. Thus, the CWA requires imposition of the 0.1 mg/l as of June 30, 2012. However, as stated previously, EPA is certainly willing to revisit the permit limit if data obtained in the study indicate a different limit is appropriate. As mentioned in response to your first question, we reiterate that EPA's action with respect to the NACA facility is consistent with our long-standing procedures for permitting a new discharger proposing to discharge into impaired waterbodies.

You asked to what degree, in numeric terms, the imposition of the 0.1mg/l effluent limit on the NACA facility would improve water quality in the watershed.

Imposing a total phosphorus limit of 0.1 mg/l would result in authorized loadings of 3.0 lbs per day of phosphorus to the receiving stream. At a 1.0 mg/l phosphorus limit, the proposed facility would be authorized to discharge over 30 lbs/day of phosphorus. This is a ten fold increase in the daily loadings of total phosphorus to Osage Creek, a stream already impaired for phosphorus, which would add nearly five tons of phosphorus annually to Osage Creek.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 0 8 2009

Ms. Teresa Marks, Director
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Re: NPDES Permit No. AR0050024-NACA

Dear Ms. Marks:

Thank you for your letter dated February 13, 2009, regarding the Environmental Protection Agency Region 6's (EPA) specific objection to the draft National Pollutant Discharge Elimination System (NPDES) permit for the Northwest Arkansas Conservation Authority (NACA) submitted to EPA for review by the Arkansas Department of Environmental Quality (ADEQ). We appreciate the State of Arkansas' strong commitment to water quality and commend you on the numerous actions taken over the last several years to address phosphorus and sediment issues in the Illinois River watershed.

As you are aware, under the Clean Water Act (CWA), EPA is tasked with ensuring that state-issued NPDES permits meet all the requirements of the CWA and its implementing regulations, including the requirement that all permits contain effluent limits sufficient to meet the water quality standards of all affected states. In January 2009, based on preliminary data, EPA determined that the 1 mg/l phosphorus effluent limit included in the draft NACA permit was not stringent enough to be protective of Arkansas water quality standards or those of the downstream State. Accordingly, we objected to issuance of the permit as drafted. Your February 13th letter included a revised draft permit submitted in response to EPA's specific objection letter of January16, 2009.

Although we believe the revised draft permit complies with EPA's objection with regard to the required additional monitoring for total phosphorus (TP) and dissolved oxygen (DO), we believe the revised draft permit still falls short of the requirements of the CWA and 40 C.F.R. Part 122 with regard to the water-quality based effluent limitation for phosphorus. EPA does not object to ADEQ's issuance of a 3-year permit to NACA. However, as we have previously discussed, EPA will not object to a total phosphorus limit of 1 mg/l for the NACA facility until June 30, 2012, based on the Statement of Joint Principles and Actions agreed to by Arkansas and Oklahoma environmental agencies in 2003. That agreement was intended to act as a complement to the provision allowing compliance schedules included in Oklahoma's 0.037 mg/l criterion for phosphorus in its six (6) scenic rivers. Oklahoma's 0.037 mg/l criterion included a compliance schedule provision allowing point source dischargers up to 10 years from July 1, 2002, or until June 30, 2012, to come into compliance with permit limits based on the criterion.

The inclusion of compliance schedules in NPDES permits for the purpose of achieving water quality standards was addressed by the EPA Administrator in *In the Matter of Star-Kist Caribe, Inc.*, 3 E.A.D. 172 (1990). In *Star-Kist*, the Administrator interpreted § 301(b)(1)(C) of the CWA to mean that compliance schedules are allowed for effluent limitations based on standards adopted after July 1, 1977, only if the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them. In this instance, Oklahoma's water quality standards indicate the intent to include with the State's phosphorus criterion a provision allowing compliance schedules. However, the standards also provide that compliance schedules are to end as of June 30, 2012, and as of that date, all dischargers must comply with effluent limits designed to meet the 0.037 mg/l criterion.

EPA further addressed the inclusion of compliance schedules in NPDES permits for the purpose of achieving water quality standards in a 2007 memorandum from the Office of Wastewater Management (enclosed). That memorandum enumerates certain principles applicable to assessing whether a compliance schedule for achieving water quality-based effluent limits is consistent with the CWA and its implementing regulations. Two of the enumerated principles are as follows:

> Any compliance schedule contained in an NPDES permit must include an enforceable final effluent limitation and a date for its achievement that is within the timeframe allowed by the applicable State or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and 40 C.F.R. § 122.2, 122.44(d) and 122.44(d)(1)(vii)(A); and
>
> Any compliance schedule that extends past the expiration date of a permit must include the final effluent limitations in the permit in order to ensure enforceability of the compliance schedule as required by CWA section 502(17) and 40 C.F.R. § 122.2

"Memorandum from Jim Hanlon, Director of the EPA Office of Wastewater Management, to Alexis Strauss, Water Division Director, EPA Region 9, dated May 10, 2007."

In this instance, a permit limit of 0.1 mg/l is necessary in order for the permit to comply with the requirement of the CWA that the permit include an effluent limit as stringent as necessary to meet water quality standards. The 1 mg/l phosphorus limit proposed for the NACA facility is an interim limit included as part of a compliance schedule ending June 30, 2012. Therefore, based on the above, NACA's permit, regardless of its term, must include an enforceable final effluent limitation for phosphorus stringent enough to meet water quality standards and a date for its achievement that is on or before June 30, 2012.[1] The permit should also include an enforceable sequence of actions or operations leading to compliance with the water quality-based effluent limit (40 C.F.R. § 122.2).

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[1] The June 15, 2012 date referenced in EPA's January 16, 2009, Specific Objection letter was in error. The correct date is June 30, 2012.

We understand that ADEQ disagrees with EPA's determination that Osage Creek is impaired for phosphorus and we are aware of the State's ongoing study of that water body. We are also aware of Oklahoma's commitment under the Joint Statement of Principles and Actions to reevaluate its 0.037 mg/l criterion for phosphorus by 2012. As EPA has stated previously, should new data indicate that a phosphorus limit of other than 0.1 mg/l is appropriate for this facility, the permit limit may be revised. However, EPA believes a total phosphorus limit of 0.1 mg/l is necessary to protect the water quality of the receiving stream from any discharges associated with the NACA facility.

Therefore, by this letter, EPA is notifying you that the revised draft permit for NACA submitted to EPA by ADEQ on February 13, 2009, is not sufficient to comply with EPA's specific objection. Instead, we ask that ADEQ resubmit a draft permit that includes language specifying that a final water-quality based effluent limit of 0.1 mg/l phosphorus applies to the NACA facility as of June 30, 2012.

Thank you for your efforts to improve the environment. If you have any questions, please feel free to contact me at (214) 665-7311 or Miguel Flores at (214) 665-7101.

Sincerely yours,

Lawrence E. Starfield
Acting Regional Administrator

Enclosure

cc: Steve Drown, Chief, Water Division, ADEQ
Mo Shafii, Asst. Chief, Water Division, ADEQ
John Sempier, Northwest Arkansas Conservation Authority

ADEQ
ARKANSAS
Department of Environmental Quality

RECEIVED
EPA-6WQ-DIR OFC
09 APR 17 PM 11:28

April 13, 2009

Mr. Miguel I. Flores
Director, Water Quality Protection Division
USEPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

6WQ-P
APR 17 2009
RECEIVED

Re: NACA Permit No. AR0050024

Dear Mr. Flores:

Pursuant to the comments provided in Mr. Starfield's correspondence of April 3, 2009, and our subsequent conversation with you last week, we are enclosing a revised draft permit for your review. In addition to monitoring for total phosphorus and dissolved oxygen, this revised permit will expire on June 30, 2012, contains an enforceable sequence of events leading to a 0.1 mg/l total phosphorus limit by July 1, 2012, and provides that the phosphorus limit may be changed upon the submission of new data indicating that a phosphorus limit of other than 0.1 mg/l is appropriate.

As we discussed, I understand that you will review this revised draft permit and let us know on or before April 16, 2009, whether or not this draft satisfactorily addresses EPA's objection. If you have any questions concerning this draft permit, please do not hesitate to call me at 682-0655

Sincerely,

Steve Drown
Chief, Water Division

cc: Jamie Ewing
Allan Gates

6WQ-L-hcpy. 6WQ-D-hcpy
6WQ-A..... 6WQ-C.....
6WQ-E..... 6WQ-P-original
6WQ-S..... .....enclosures
....

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Permit Number: AR0050024

AUTHORIZATION TO DISCHARGE WASTEWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.),

The applicant's mailing address is:

Northwest Arkansas Conservation Authority (NACA)
P.O. Box 2487
Rogers, AR 72757

The facility address is:

Northwest Arkansas Conservation Regional Wastewater Treatment Plant
11579 Snavely Road
Bentonville, AR 72712

is authorized to discharge from a facility located as follows: from I-540 and 264, drive west on 264 approximately 7.5 miles to Haden Road, then turn south on Haden Road and drive approximately 2.0 miles to Snavely Road, then turn south and drive 0.5 miles south to the WTP in Benton County, Arkansas.

Latitude: 36° 13' 36"; Longitude: 94° 17' 18"

to receiving waters named:

Osage Creek thence to the Illinois River in Segment 3J of the Arkansas River Basin.

The outfall is located at the following coordinates:

Outfall 001: Latitude: 36° 13' 20"; Longitude: 94° 17' 14"

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, and IV hereof.

Issue Date:

Effective Date:

Expiration Date: June 30, 2012

_____

Teresa Marks
Director
Arkansas Department of Environmental Quality

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PART I
PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 - treated sanitary wastewater.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below from a treatment system consisting of screening, grit removal, extended aeration oxidation ditch activated sludge process with biological nutrient removal, final clarifiers, polishing filters, UV disinfection, and post aeration with a design flow of 3.6 MGD.

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day; unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Flow (MGD)	N/A	Report	Report (Daily Max)	once/day	totalizing meter
Carbonaceous Biochemical Oxygen Demand (CBOD5)	300.2	10	15	three/week	6-hr Composite
Total Suspended Solids (TSS)	450.4	15	22.5	three/week	6-hr Composite
Ammonia Nitrogen (NH3-N)					
(April-Oct)	60.0	2	3	three/week	6-hr Composite
(Nov-March)	120.1	4	6	three/week	6-hr Composite
Dissolved Oxygen[2]					
(May-Oct)	N/A	5, (Inst. Min.)		three/week	grab
(Nov-Apr)	N/A	7, (Inst. Min.)		three/week	grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
(Apr-Sept)	N/A	200	400	three/week	grab
(Oct-Mar)	N/A	1000	2000	three/week	grab
Total Phosphorus[3]	30.0	1	1.5	three/week	grab
Nitrate + Nitrite Nitrogen	Report	Report	Report	three/week	grab
pH	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	three/week	grab
Chronic WET testing[4]	N/A	N/A	N/A	once/quarter	24-hr composite

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SECTION B. PERMIT COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

1. Compliance with all effluent limitations is required on the effective date of the permit.

2. Instream monitoring points

   The sampling points, one upstream of the discharge location and one downstream must be established. Coordinates of these locations must be submitted to the Department 30 days prior to the first discharge.

3. Priority Pollutant Scan

   Once construction of the wastewater treatment facility is complete, the permittee shall perform a complete Priority Pollutant Scan. The results shall be submitted to the Department within 90 days from the first discharge.

4. Total Phosphorus Limits:

   A. The monthly average effluent limitation of 1 mg/l shall apply during the period from the effective date of the permit through June 30, 2012.

   B. The Monthly Average effluent limitation of 0.1 mg/l will become effective on July 1, 2012. The Department reserves the right to revise the permit limit of 0.1 mg/l for Total Phosphorus upon submission of data which indicates that a Total Phosphorus limit other than 0.1 mg/l is appropriate.

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day)	Concentration (mg/l)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Total Phosphorus	3.0	0.1	0.15	Once/week	Grab

DRAFT

C. The permittee shall submit progress reports addressing the progress towards attaining the monthly average effluent limit of 0.1 mg/l according to the following schedule:

ACTIVITY	DUE DATE
Progress Report	June 1, 2010
Progress Report	June 1, 2011
Achieve Final Limits	June 30, 2012

The permittee has the option to undertake any study deemed necessary to meet the monthly average limitation of 0.1 mg/l and 7-day average limitation of 0.15 mg/l for total Phosphorus. Any additional treatment must be approved and construction approval granted prior to final installation. The permittee must submit revised plans, specifications, design calculations and ADEQ Form 1 or before January 1, 2012 (i.e., approximately 180 days prior to July 1, 2012 new limit effective date).

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13. Disinfection unit

The permittee is required to maintain the inventory of spare parts for the UV disinfection unit.

14. Total Phosphorus Limits:

A. The monthly average effluent limitation of 1 mg/l shall apply during the period from the effective date of the permit through June 30, 2012.

B. The Monthly Average effluent limitation of 0.1 mg/l will become effective on July 1, 2012. The Department reserves the right to revise the permit limit of 0.1 mg/l for Total Phosphorus upon submission of data, which indicates that a Total Phosphorus limit other than 0.1 mg/l is appropriate.

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day)	Concentration (mg/l)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Total Phosphorus	3.0	0.1	0.15	Once/week	Grab

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ADEQ received a permit application for the Osage Basin Wastewater District in 2004 to construct a new wastewater plant to discharge to Osage Creek. As a result of this permit application, EPA requested additional technical information to demonstrate that the monthly average effluent limitation of 1.0 mg/l for total phosphorus conforms to guidelines and requirements established by the Clean Water Act (CWA) and the NPDES regulations (i.e. 40 CFR § 125.3). ADEQ provided this justification. Subsequently, EPA approved the permit for the Osage Basin Wastewater District with a total phosphorus limit of 1.0 mg/l. Therefore, a phosphorus limit of 1.0 mg/l was continued from the previous EPA approval decision letter for the Osage Basin Wastewater District. This limit is consistent with those limits for the existing large municipal dischargers set forth in the December 18, 2003 agreement between ADEQ and Oklahoma which calls for certain existing dischargers to reduce the concentration of phosphorus in their effluent to 1 ppm (mg/l), based on a 30-day average.

The wastewater treatment technology chosen by the permittee has been specifically selected to consistently achieve this permit limitation. Although the system can theoretically meet a lower Phosphorus limit, the Department has no justification for lowering the limit. The Department continues to strongly disagree with the EPA decision to add Osage Creek to the list of impaired water bodies, however, the third party study on Osage Creek for designated use attainment evaluation is currently being performed. This study is scheduled to be completed in mid 2009 and a final report submitted by the end of December 2009.

A limit of 0.1 mg/l for Total Phosphorus has been placed in the permit in order to satisfy the EPA's specific objection to the ADEQ's draft permit and in accordance with EPA's April 03, 2009 letter, though the ADEQ does not agree that 0.1 mg/l limit is necessary or appropriate to protect Waters of the State as stated above. The Department reserves the right to revise the permit limit of 0.1 mg/l for Total Phosphorus upon submission of data which indicates that a Total Phosphorus limit other than 0.1 mg/l is appropriate.

Oklahoma 303(d) List:

The receiving stream, Osage Creek flows approximately 10 miles to its confluence with the Illinois River. The Illinois River flows approximately an additional 14.7 miles before entering the State of Oklahoma.

According to Appendix C Category 5 303(d) List of the State of Oklahoma "2006 Integrated Water Quality Assessment Report" various reaches of the Illinois River in Oklahoma are on this state's currently approved 303(d) list as impaired due to Total Phosphorus, Nitrates, Enterococci Bacteria, Escherichia coli (E. coli), and/or Total Fecal Coliform and listed in Category 5. According to 2006 Integrated Report, TMDL was scheduled to be performed in 2007. This date has been changed to 2013 in the "Water Quality in Oklahoma 2008 Report".

DRAFT

17. PERMIT COMPLIANCE.

Compliance with final effluent limitations is required by the following schedule:

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

1. Compliance with all effluent limitations is required on the effective date of the permit.

2. Instream monitoring points

   The sampling points, one upstream of the discharge location and one downstream must be established. Coordinates of these locations must be submitted to the Department 30 days prior to the first discharge.

3. Priority Pollutant Scan

   Once construction of the wastewater treatment facility is complete, the permittee shall perform a complete Priority Pollutant Scan. The results shall be submitted to the Department within 90 days from the first discharge.

4. Total Phosphorus Limits:

   A. The monthly average effluent limitation of 1 mg/l shall apply during the period from the effective date of the permit through June 30, 2012.

   B. The Monthly Average effluent limitation of 0.1 mg/l will become effective on July 1, 2012. The Department reserves the right to revise the permit limit of 0.1 mg/l for Total Phosphorus upon submission of data which indicates that a Total Phosphorus limit other than 0.1 mg/l is appropriate.

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day)	Concentration (mg/l)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Total Phosphorus	3.0	0.1	0.15	Once/week	Grab

DRAFT

C. The permittee shall submit progress reports addressing the progress towards attaining the monthly average effluent limit of 0.1 mg/l according to the following schedule:

ACTIVITY	DUE DATE
Progress Report	June 1, 2010
Progress Report	June 1, 2011
Achieve Final Limits	June 30, 2012

The permittee has the option to undertake any study deemed necessary to meet the monthly average limitation of 0.1 mg/l and 7-day average of 0.15 mg/l for Total Phosphorus. Any additional treatment must be approved and construction approval granted prior to final installation. The permittee must submit revised plans, specifications, design calculations and ADEQ Form 1 or before January 1, 2012 (i.e., approximately 180 days prior to July 1, 2012 new limit effective date).

18. MONITORING AND REPORTING.

The applicant is at all times required to monitor the discharge on a regular basis and report the results monthly. The monitoring results will be available to the public.

21. SOURCES.

The following sources were used to draft the NPDES discharge permit and state construction permit:

a. Application for NPDES permit No. AR0050024 received 03/19/2008
b. Arkansas Water Quality Management Plan (WQMP).
c. APCEC Regulation No. 2.
d. APCEC Regulation No. 3.
e. APCEC Regulation No. 6.
f. 40 CFR Parts 122, 125, 133 and 403.
g. Discharge permit file AR0050024.
h. "Arkansas Water Quality Inventory Report 2004 (305B)", ADEQ.
i. Arkansas 2004 303(d) List as Approved by EPA.
j. Memo from Mo Shafii to Engineers dated March 28, 2005
k. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.
l. Continuing Planning Process (CPP).
m. Region 6 Implementation Guidance for Arkansas Water Quality Standards promulgated at 40 CFR Part 131.36.
n. The State of Oklahoma 2006 Integrated Water Quality Assessment Report and Draft 2008 Integrated Report.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 27 2009

The Honorable John Boozman
House of Representatives
Washington, DC 20515

Dear Congressman Boozman:

Thank you for providing the opportunity for the Environmental Protection Agency's (EPA's) Office of Water and Region 6 staff to meet with you and your staff on Thursday, April 2, 2009. We appreciate and acknowledge your concerns regarding the appropriate phosphorous limits for the draft National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit for the yet-to-be constructed Northwest Arkansas Conservation Authority (NACA) wastewater treatment plant. During the meeting, EPA provided you with information and sought to answer various questions you posed regarding the proposed permit and the water bodies in question, beyond that which we previously provided in correspondence dated February 5, 2009. During the meeting, you raised some questions that required additional research on our part. We are now responding. Subsequent to the meeting, the Arkansas Department of Environmental Quality (ADEQ) revised NACA's draft permit and submitted it for EPA review. The revised draft permit addresses EPA's concerns and includes an effluent limitation for total phosphorus of 0.1 mg/L. Accordingly, EPA Region 6 has withdrawn its specific objection to the issuance of NACA's permit (Enclosure #1).

First, you specifically asked about the possible implications for other municipal dischargers in the Illinois River basin as a result of the EPA's actions related to the NACA facility; and, how/when EPA would be informing those dischargers of possible changes in their permits upon reissuance. EPA believes that the municipalities in both Oklahoma and Arkansas have been made aware of the ongoing water quality issues in the basin for many years. Considering ADEQ's primary role in implementing the NPDES program in Arkansas, EPA would not typically engage in direct dialogue with municipalities regarding conditions that ADEQ may impose when reissuing their permits. However, EPA has been involved in ongoing conversations with ADEQ regarding water quality issues in the Illinois River Basin and is prepared to stay engaged on this issue, including making use of its normal oversight role to review relevant permits.

EPA's communications with ADEQ have consistently and clearly referenced the need for basin wide efforts to address phosphorus impairment in Osage Creek and the Illinois River. EPA actively participated in discussions between Arkansas and Oklahoma that yielded the 2003 "Statement of Joint Principles and Actions" which was founded upon a watershed approach to improving water quality in the Illinois River Basin. In December 2004, EPA wrote to ADEQ saying, "We continue to be very concerned about phosphorus loadings in the Illinois River Watershed. We strongly encourage ADEQ to

consider addressing this issue through a watershed approach . . ." Then, in 2006, EPA initiated preliminary efforts to establish a Total Maximum Daily Load (TMDL) for Osage Creek, an action which could have yielded specific waste load allocations for point source dischargers. With respect to recent developments of potential interest to municipalities in the basin, EPA's January 16, 2009, letter to ADEQ states, "as of 2012 all dischargers to the Illinois River watershed, including NACA, will be required to meet all applicable water quality standards, including narrative standards and the standards of adjacent downstream states." EPA believes that ADEQ has informed other municipal dischargers of the potential for changes when their permits are reissued.

Furthermore, when such permits are issued, ADEQ could potentially include compliance schedules in those permits if the state's state water quality standards authorize the use of such schedules. Compliance schedules, if determined to be appropriate, must be written to achieve water quality-based effluent limitations "as soon as possible." Schedules may allow time for a discharger to upgrade its facility by installing additional treatment technologies. The steps that a discharger must take to install treatment technologies as well as any other measures that are needed to ultimately achieve water quality-based effluent limitations must be included in the schedule and are considered enforceable permit terms.

For the reasons discussed above, EPA believes that all dischargers potentially affected by the NACA situation are already aware of possible future changes to their phosphorus limits and will have appropriate opportunity to comment on any such changes and time to comply with such limitations if compliance schedules are justified under state and federal law. However, should there be a need to further discuss water quality issues in the Illinois River Basin, or the role of municipalities in helping address phosphorus impairment, EPA is prepared to participate in those discussions.

As further follow-up to your questions, I am enclosing the following documents:

1. A summary of the EPA's modeling efforts that project the water quality impacts of a proposed 3.6 million gallons per day discharge from the NACA facility under three effluent limit scenarios: a phosphorus limit of 1 mg/L; a phosphorus limit of 0.5 mg/L; and, a phosphorus limit of 0.1 mg/L. As indicated in the modeling summary, EPA determined that NACA's compliance with a 0.1 mg/l total phosphorus limit will be protective of applicable water quality standards in both Arkansas and Oklahoma. However, discharges of either 0.5 or 1 mg/L are projected to contribute to the phosphorus impairment in the Illinois River at the point it enters Oklahoma. (Enclosure #2)

2. A listing of other states that have established phosphorus water quality criteria that are comparable or more stringent than those approved in Oklahoma. (Enclosure #3)

3. A listing of over 80 other permits that include limits for phosphorus of 0.5 mg/L or lower. This data is pulled from EPAs Integrated Compliance Information System which currently includes information from about half of all authorized states. (Enclosure #4)

Based on the enclosed information and that which we have previously provided, we believe that EPA's position regarding the NACA permit is scientifically valid, justified as necessary to protect applicable water quality standards, and legally sound. We are pleased that ADEQ's revised permit has resolved our concerns.

Thank you for your continued support and interest in helping protect the environment. I hope you find the information we have provided adequate. After reviewing the materials, if you feel there may be a need for additional information, or should you have further questions, please feel free to contact me or your staff may contact LaWanda Thomas at (214) 665-7466

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

Enclosures (4)

w/out Enclosures
cc: Steve Drown, Director, Water Quality Division, ADEQ
John Sampier, Northwest Arkansas Conservation Authority

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 16 2009

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7007 1490 0000 3068 8306)

Mr. Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: Withdrawal of Specific Objection to NPDES Permit No. AR0050024
Northwest Arkansas Conservation Authority

Dear Mr. Drown:

Thank you for your April 13, 2009, letter addressing the issues raised in our January 16, 2009, specific objection to issuance of draft NPDES Permit No. AR0050024 to the Northwest Arkansas Conservation Authority (NACA). Based on our review of the revised draft permit and fact sheet you provided with your letter, we find that the revised draft permit addresses our concerns set forth in our January 16, 2009 letter. Accordingly, EPA Region 6 withdraws its specific objection to the issuance of the above referenced draft NPDES permit.

As the basis for withdrawing its specific objection to issuance of the revised NPDES permit, EPA finds that the permit includes appropriate requirements for upstream and downstream monitoring of total phosphorus and an enforceable effluent limitation of 0.1 mg/l for total phosphorus, effective July 1, 2012. EPA respectfully acknowledges the Arkansas Department of Environmental Quality's disagreement with the legal and technical basis for the 0.1 mg/l effluent limitation for total phosphorus, as expressed in the fact sheet accompanying the revised draft permit. However, because EPA has independently determined that NACA's compliance with this effluent limit is necessary to protect applicable water quality standards in both Arkansas and Oklahoma, and because the permit contains such effluent limit, EPA is withdrawing its specific objection.

We appreciate the cooperative spirit with which Arkansas has worked to resolve the issues underlying our earlier objection to issuance of the previous draft permit. Should you have any remaining questions regarding this matter, please contact me at (214) 665-7101. Alternatively, your staff may contact Claudia Hosch at (214) 665-7170 or via email to hosch.claudia@epa.gov.

Sincerely yours,

for Ronald D. Crossland

Miguel I. Flores
Director
Water Quality Protection Division

cc: Teresa Marks, Director, ADEQ
Ryan Benefield, Deputy Director, ADEQ
Mo Shafii, Assistant Chief, Water Division, ADEQ
John Sampier, Executive Director, NACA
J.D. Strong, Secretary of the Environment, State of Oklahoma

Northwest Arkansas Conservation Authority (NACA): A Model Simulation of Potential Impacts from a Proposed 0.1 mg/l Phosphorus Discharge

Summary:

EPA Region 6 calibrated and ran an in-house modified Streeter Phelps Model to assess the potential impact of the proposed NACA discharge on phosphorus concentrations in the Illinois River at the Oklahoma/Arkansas state line. The model projected a proposed effluent discharge containing 0.1 mg/L of total phosphorus (TP) would be protective of applicable water quality standards in both Arkansas and Oklahoma.

Model:

The Streeter Phelps model is a simple surface water model most commonly used to predict downstream impacts of oxygen-consuming substances on water quality. EPA calibrated the model to actual measured stream data. The data were obtained from Arkansas Department of Environmental Quality in-stream monitoring stations from 1990 to 2007.

Assumptions:

The model included inputs from point sources (using effluent data from POTWs) and non-point sources (from a flow curve and reference sampling) in the watershed. The model accounted for contributions from the Fayetteville and Springdale POTWs, and the respective stream segments that they discharge into, which are tributaries to the Illinois River. POTW data included:

- NACA Discharge (Calibration Run): 0.00 MGD
- NACA Discharge (Projection Run): 3.6 MGD at 0.1 mg/l TP
- Rogers POTW Discharge: 14.0 MGD at 0.652 mg/l TP
- Springdale Segment Model Output: 17.456 MGD at 0.391 mg/l TP
- Fayetteville Segment Model Output: 199.704 MGD at 0.02mg/l TP

The Oklahoma numeric criterion for TP (0.037 mg/l) is a 30-day geometric mean, and stream flows considered in the calibrated model were set to annual mean values. Flow data for POTW discharges are based on facility design flows. Data on TP discharges from POTWs were based on discharge monitoring reports from August 2007 to August 2008.

Conclusions:

EPA determined that NACA's compliance with a 0.1 mg/l total phosphorus limit will be protective of applicable water quality standards in both Arkansas and Oklahoma. The model run at 0.5 mg/L projected a 7% increase of TP at the state line, relative to the current level of phosphorus in the Illinois River. The model run at 1.0 mg/L projected a 14% increase of TP at the state line.

It is important to note that the current level of phosphorus in the Illinois River is at 0.072 mg/L, which is above the Oklahoma water quality numeric criterion for TP and results in the river being listed as impaired.

Sampling of Major POTWs with .5mg/l or Lower for TP Reporting in ICIS (about half of all states)
4/8/09

Facility Name	Monthly[1] Limit in mg/L
ARAPAHOE COUNTY W AND WW AUTHORITY	.05
COMMONWEALTH UTILITIES CORP*	.05
PLUM CREEK WASTEWATER AUTHORITY	.05
STONEGATE VILLAGE METROPOLITAN DISTRICT	.05
ATTLEBORO W P C F	.1
HUDSON WWTF	.1
HYRUM CITY CORPORATION	.1
MARLBOROUGH EASTERLY WWTP^	.1
MARLBOROUGH WESTERLY WWTP	.1
MAYNARD WWTF	.1
MCI NORFOLK-WALPOLE WWTF	.1
NORTH ATTLEBOROUGH WWTP	.1
PARKER WATER AND SANITATION DISTRICT	.1
RUIDOSO-RUIDOSO DOWNS WWTP-LIN	.1
SNYDERVILLE BASIN SID (E CNYN)	.1
WARWICK SEWER AUTHORITY	.1
WEST WARWICK TOWN HALL	.1
WESTBOROUGH WWTP	.1
WOONSOCKET CITY HALL	.1
DELHI (V)	.11
ONONDAGA CO SEPT DRAIN AND SANIT^	.12
FORSYTH CO FOWLER WATER RECL	.13
GAINESVILLE FLAT CR WPCP	.13
MOSCOW, CITY OF	.136
MCDONOUGH (WALNUT CRK WPCP)	.15
WALTON (V)	.15
D.C. WASA (BLUE PLAINS)	.18
MATTAWOMAN WWTP	.18
PISCATAWAY WWTP	.18
AYER W WTP	.2
BACK RIVER WWTP	.2
BILLERICA WWTP^	.2
BROCKTON AWRF^	.2
CHARLES RIVER PCD	.2
CONCORD WWTF	.2
GARDNER WPCF	.2
KEENE CITY OF	.2
LEE WWTF	.2
LEOMINSTER WWTP	.2
MANSFIELD WPAF	.2
MEDFIELD WWTP	.2
MIDDLEBOROUGH WPCF	.2
MILFORD WWTF	.2
NORTH BROOKFIELD WWTP	.2

[1] Monthly unless otherwise noted. * = Daily. ^ = Annual.

SOUTHBRIDGE WWT P/DEPT OF PW	.2
SPENCER WWTP	.2
STURBRIDGE WPCF	.2
TEMPLETON WWTF	.2
UPTON W WTP	.2
VEOLIA WATER N. AMER.-NE, LLC	.2
WAREHAM WPCF	.2
WEBSTER WWTF	.2
YORKTOWN (T)	.2
COBB CO - NORTHWEST WPCP	.23
BELCHERTOWN WWTP	.25
EPPING*	.28
CLAYTON CO (NORTHEAST WPCP)	.3
DEKALB CO-POLEBRIDGE CR WPCP	.3
DEKALB CO-SNAPFINGER CR WPCP	.3
DOUGLASVILLE SOUTH CENTRAL WPCP	.3
FULTON CO-CAMP CREEK WPCP	.3
GWINNETT CO BEAVER/SWEETWATER	.3
GWINNETT CO JACKSON CR	.3
GWINNETT CO NO BUSINESS CR	.3
GWINNETT CO JACKS CRK	.3
GWINNETT CO-YELLOW RIVER WPCP	.3
LA PLATA WWTP	.3
LOGANVILLE WPCP	.3
PRINCESS ANNE WWTP	.3
ROCKDALE CO.(QUIGG BRANCH)	.3
STOCKBRIDGE WPCP	.3
CHEROKEE CO.-ROSE CRK WPCP	.36
SPARKS, CITY OF	.4
NEWPORT TOWN OF	.42
BRECKENRIDGE SANITATION DISTRICT*	.5
CITY OF CANTON WPCP	.5
COPPER MOUNTAIN CONSOLIDATED*	.5
DECHERD CITY STP	.5
FARMINGTON WWTP	.5
FRISCO SANITATION DISTRICT*	.5
FULTON CO (LITTLE RV. WPCP)	.5
LAFAYETTE STP	.5
LAWRENCEBURG STP	.5
QUAKERTOWN BOROUGH	.5
SENECA WWTP	.5
SHIPPENSBURG BOROUGH	.5
SNAKE RIVER WWTF*	.5
SOMERSWORTH WPCF	.5
UPPER MONTGOMERY JOINT AUTH	.5
VILLAGE OF TAOS SKI VALLEY	.5
WARMINSTER MUN AUTH	.5
WINCHENDON W P C F	.5

Examples of State Adopted Numeric Total Phosphorous Standards
4/8/09

State	Year	Value	Applicability
AZ	1996	.030 - 1. mg/l	Selected waters
CA	1994	.008 - .3 mg/l	Selected waters RB 6
CO	2001	.0074 - .350 mg/l	Selected waters
IL	2002	.007 mg/l	Open waters of Lake Michigan
IL	1979	.05 mg/l	Aquatic life
MN	2008	.012 - .09 mg/l	Lakes statewide
MT	2002	.02 - .039 mg/l	Segments of the Clark Fork R
NJ	2002	.05 -.1 mg/l	Eutrophication
NV	1998	.05 -.1 mg/l	Selected waters; aquatic life
NY	1999	.02 mg/l	Aquatic life
OK	2002	.037 mg/l	Scenic Rivers
OR	2001	.08 - .1 mg/l	Selected waters
RI	1997	.025 mg/l	Eutrophication
SC	2001	.02 - .09 mg/l	Eutrophication
TN	2001	.01 - .250 mg/l	Recommended interp of narr. criteria
VA	2006	.01 - .04 mg/l	Aquatic life, selected waters
VT	2000	.01 - .054 mg/l	Eutrophication
WA	1997	.025 mg/l	Selected waters; eutrophication
WV	2008	.03-.05 mg/l	Aquatic life, selected waters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

JAN 22 2010

The Honorable John Boozman
Ranking Member
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
House of Representatives
Washington, DC 20515

Dear Ranking Member Boozman:

I appreciate the opportunity for Environmental Protection Agency (EPA) officials to meet with you and Chairman Oberstar yesterday to discuss the phosphorous limit determination for the yet-to-be constructed Northwest Arkansas Conservation Authority (NACA) wastewater treatment plant.

EPA is committed to open and transparent decision making based on the best available technical and scientific data and analytical tools. I want to be sure you completely understand the data and the technical, scientific and legal rationale behind the determination that a total phosphorous limit of 0.1 mg/L for the NACA wastewater treatment plant is appropriate to protect applicable water quality standards in Arkansas and Oklahoma.

In light of this commitment, I want to offer you or any of your staff a briefing on the data, the modeling and any other questions you may have related to this determination. Please let us know a convenient time for us to give you this briefing. We are happy to brief you in Washington DC or in your home district.

Thank you for your continued interest in this issue. If you would like additional information or would like to schedule the data and model briefing, please feel free to contact me or your staff may contact LaWanda Thomas at (214) 665-7466 or Greg Spraul at (202) 564-0255.

Sincerely,

Al Armendariz
Regional Administrator

cc: The Honorable James L. Oberstar, Chairman
Committee on Transportation and Infrastructure
United States House of Representatives

H. Res. 995, as amended, asks for the production of technical and scientific documentation in the possession of the Administrator of the EPA relating to the Administrator's technical and scientific rationale on the establishment of a total phosphorus limit of 0.1 mg/L for the NACA wastewater treatment facility, Arkansas. The Committee ordered the resolution, as amended, reported to the House without recommendation by voice vote with a quorum present.

SUMMARY OF THE LEGISLATION

H. Res. 995, as amended, requests the President to transmit to the House, not later than 30 days after the date of adoption of the resolution, copies of all technical and scientific documentation in the possession of the Administrator of the EPA relating to the Administrator's technical and scientific rationale on the establishment of a total phosphorus limit of 0.1 mg/L for the NACA wastewater treatment facility, Arkansas.

LEGISLATIVE HISTORY AND COMMITTEE CONSIDERATION

H. Res. 995 was introduced on December 19, 2009, and referred to the Committee on Transportation and Infrastructure. On January 27, 2010, the Committee met in open session to consider H. Res. 995. The Committee adopted an amendment to the resolution by voice vote with a quorum present. The Committee on Transportation and Infrastructure ordered H. Res. 995, as amended, reported without recommendation to the House by voice vote with a quorum present.

RECORD VOTES

Clause 3(b) of rule XIII of the House of Representatives requires each committee report to include the total number of votes cast for and against on each record vote on a motion to report and on any amendment offered to the measure or matter, and the names of those members voting for and against. There were no recorded votes taken in connection with consideration of H. Res. 995, or ordering the resolution, as amended, reported. A motion to order H. Res. 995, as amended, reported without recommendation to the House was agreed to by voice vote with a quorum present.

COMMITTEE OVERSIGHT FINDINGS

With respect to the requirements of clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee's oversight findings and recommendations are reflected in this report.

COST OF LEGISLATION

With respect to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, H. Res. 995 is a resolution of the House of Representatives, and therefore does not have the force of law. However, there may be minimal costs associated with this resolution for fiscal year 2010 for the production of documents.

COMPLIANCE WITH HOUSE RULE XIII

1. With respect to the requirement of clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, and section 308(a) of the Congressional Budget Act of 1974, the Committee advises that

the resolution contains no measure that authorizes funding, so no comparison of the total estimated funding level for the relevant programs to the appropriate level under current law is required.

2. With respect to the requirement of clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the Committee advises that the resolution contains no measure that authorizes funding, so no statement of general performance and objectives for any measure that authorizes funding is required.

3. With respect to the requirement of clause 3(c)(3) of rule XIII of the Rules of the House of Representatives and section 402 of the Congressional Budget Act of 1974, the Committee advises that the resolution contains no measure that authorizes funding, so no cost estimate nor comparison for any measure that authorizes funding is required.

COMPLIANCE WITH HOUSE RULE XXI

Pursuant to clause 9 of rule XXI of the Rules of the House of Representatives, the Committee is required to include a list of congressional earmarks, limited tax benefits, or limited tariff benefits, as defined in clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives. H. Res. 995 does not contain any earmarks, limited tax benefits, or limited tariff benefits under clause 9(e), 9(f), or 9(g) of rule XXI.

CONSTITUTIONAL AUTHORITY STATEMENT

Pursuant to clause 3(d)(1) of rule XIII of the Rules of the House of Representatives, H. Res. 995 is a resolution of the House of Representatives, and therefore does not have the force of law. As such, clause 3(d)(1) of rule XIII does not apply.

FEDERAL MANDATES STATEMENT

H. Res. 995, as amended, contains no Federal mandates.

PREEMPTION CLARIFICATION

Section 423 of the Congressional Budget Act of 1974 requires the report of any Committee on a bill or joint resolution to include a statement on the extent to which the bill or joint resolution is intended to preempt state, local, or tribal law. The Committee states that H. Res. 995, as amended, does not preempt any state, local, or tribal law.

ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act are created by this legislation.

APPLICABILITY TO THE LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (P.L. 104–1).

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

H. Res. 995, as amended, makes no changes in existing law.

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