

BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

IN THE MATTER OF:

SHUMAKER PUBLIC SERVICE CORPORATION
P.O. BOX 3108
EAST CAMDEN, ARKANSAS 72118

DOCKET NO. 15-003-P

LIS 15-135

AFIN: 07-00025

NPDES Permit No. AR0034363

PERMIT APPEAL RESOLUTION

This Permit Appeal Resolution (PAR) is entered into for the purpose of resolving this proceeding pursuant to the authority of the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101, *et seq.*, and the regulations promulgated thereunder. All issues involved in the proceeding have been settled by agreement of Shumaker Public Service Corporation (Shumaker) and the Director of the Arkansas Department of Environmental Quality (ADEQ). It is therefore agreed and stipulated that the following Findings of Fact and Order and Agreement be entered herein.

FINDINGS OF FACT

1. Shumaker owns and operates a wastewater treatment facility located on Bear Road in the Highland Industrial Park, approximately one (1) mile east of the City of East Camden, Arkansas.
2. Shumaker is authorized to discharge treated wastewater into Two Bayou Creek, a tributary of the Ouachita River, pursuant to NPDES Permit No. AR0034363 ("Permit"). ADEQ's renewal of that Permit was issued on April 11, 2015, with an effective date of July 1, 2015.
3. On June 10, 2015, Shumaker filed a timely Request for Commission Review and Adjudicatory Hearing that sought review of portions of the Permit.

4. Shumaker and ADEQ have agreed to a resolution of all issues raised in this permit appeal, the terms of which are set forth in this PAR.

ORDER AND AGREEMENT

1. Part I, Section A., footnotes 8 & 9 of the Permit will be revised to read as follows:

8 *C. dubia* Sub-Lethal WET limits become effective on 7/1/2018. Prior to 7/1/2018, the 7-day *C. dubia* Sub-Lethal NOEC is report only.

9 *P. promelas* Sub-Lethal WET limits become effective on 7/1/2018. Prior to 7/1/2018, the 7-day *P. promelas* Sub-Lethal NOEC is report only.

2. Part IB of the Permit and Section 16 of the Statement of Basis (Permit Compliance Schedule) will be revised to specify that the final compliance date for Sub-Lethal limits for both *C. dubia* and *P. promelas* will be July 1, 2018, and that the first progress report is due July 1, 2016 and the second progress report is due July 1, 2017.

3. In order to clarify that the final compliance date of 3/22/2016 specified in the TRE is applicable to lethal limits for *C. dubia* (but not sub-lethal limits), the second sentence of Condition No. 8 of Part II of the Permit will be revised to read as follows:

The TRE plan approved on 9/16/2014 includes milestone schedule dates and a final compliance date of 3/22/2016 for lethal WET limits for *C. dubia*.

4. There will be no reduction in WET monitoring frequency for *C. dubia* or *P. promelas* during the five-year Permit term. If Permittee can demonstrate no Reasonable Potential (RP), at Permit renewal ADEQ may consider a reduced frequency as appropriate at that time.

5. Pursuant to Act 575 of 2015, Part II, Condition 5 will be deleted and Shumaker will not be required to maintain financial assurance. The existing financial assurance, represented by

BancorpSouth Bank Letter of Credit No. 550000843843, will be released upon the effective date of the modified permit.

6. Part II, Condition 7 will be modified to read as follows:

7. The permittee shall finalize the Draft Site Specific Copper Water Effect Ratio (Draft WER) by using the general outline of the WER process as follows:

A. Permittee addresses the EPA's technical comments dated 2/22/2008 on the Draft WER (prepared by AquaEter dated September 2007).

B. Permittee submits final revised WER to ADEQ for review and submittal to EPA no later than ninety (90) days after modified permit effective date.

C. ADEQ adds Final WER (as approved by US EPA) to APC&EC Regulation No. 2 in next triennial review or the facility may choose to move forward with third-party rulemaking.

If adopted in Reg. 2, the Department will use any final EPA approved Copper WER in any future reasonable potential evaluations for the necessity of Copper effluent limitations.

Upon adoption of the WER into Reg. 2 and approval of Reg. 2 by US EPA, the condition to monitor and report Copper contained in Part I, Section A, will cease.

7. A footnote referencing Copper monitoring and reporting will be added to the bottom of the table in Part I, Section A of the Permit to read as follows:

10 Copper monitoring and reporting requirements will cease upon adoption of a site specific WER into Regulation No. 2. See Condition No. 7 of Part II.

8. This PAR shall in no way limit the right of Shumaker to comment on or appeal the terms of the modified permit issued pursuant to this PAR if the modified permit differs in any respect from the agreed terms and conditions set forth in Order and Agreement paragraphs number 1-7.


9. A modified permit shall be issued by ADEQ. The modified permit is subject to the terms and conditions of this PAR and with the constraints of state and federal law.

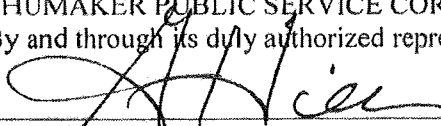
10. The PAR and modified permit are subject to public review and comment. ADEQ retains the right and discretion to set aside the PAR based on comments received within the thirty (30)-day public comment period. If the PAR is set aside, Shumaker's appeal shall be simultaneously reinstated. Subject to the foregoing, and in accord with APC&EC Reg. 8.615(A), the Request for Commission Review and Adjudicatory Hearing in this matter is hereby withdrawn.

11. The PAR and the resulting permit modifications are contingent upon final approval from the United States Environmental Protection Agency (US EPA) Region 6.

12. The undersigned representative of Shumaker certifies that he or she is an officer of Shumaker Public Service Corporation, being duly authorized to execute and bind Shumaker to the terms and conditions contained herein. Execution of the PAR by an individual other than an officer of Shumaker Public Service Corporation shall be accompanied by a resolution granting signature authority to the individual as duly ratified by the governing body of the corporation.

ENTERED into this 13th day of November, 2015.


Becky W. Keogh, Director
Arkansas Department of Environmental Quality

SHUMAKER PUBLIC SERVICE CORPORATION
By and through its duly authorized representative

Gene Hall, President

AR. POLLUTION CONTROL
& ECOLOGY COMMISSION
FILED BY
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ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

IN THE MATTER OF:

**SHUMAKER PUBLIC SERVICE CORPORATION
P.O. BOX 3108
EAST CAMDEN, ARKANSAS 72118**

**AFIN#07-00025
PERMIT NO. AR0034363**

DOCKET NO. 15- 003 -P

**REQUEST FOR COMMISSION REVIEW
AND ADJUDICATORY HEARING**

Pursuant to Ark. Code Ann. § 8-4-205 and Regulation No. 8, §§ 8.214 and 8.603, Shumaker Public Service Corporation (“Shumaker”) hereby requests a hearing to review ADEQ’s final permitting decision on NPDES Permit AR0034363. In support of its request, Shumaker states:

1. Shumaker owns and operates a wastewater treatment facility near East Camden, Arkansas that serves, among others, facilities located within the Highland Industrial Park and the City of East Camden, Arkansas. This treatment facility is located on Bear Road in the Highland Industrial Park, approximately one (1) mile east of the City of East Camden, Arkansas. Shumaker discharges treated wastewater into Two Bayou Creek, a tributary of the Ouachita River.
2. Shumaker submitted an application for renewal of its NPDES discharge permit in accordance with Regulation 6, *Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES)* on August 23, 2013.
3. By letter dated September 3, 2013, ADEQ informed Shumaker that its application was determined to be administratively complete.

4. On December 11, 2014, ADEQ issued a Draft Permit for public notice and comment. Notice of this draft permit was published that same day.

5. Shumaker submitted timely written comments on the Draft Permit on January 12, 2015.

6. On April 11, 2015, Ellen Carpenter, chief of ADEQ's water division signed Shumaker's final permit. The final permit was served on Shumaker May 15, 2015. It is from this final permitting decision that this hearing request is filed.

**Issue 1. Part I, Section A., footnotes 8 & 9
(Compliance Schedule for Sub-lethal WET Limit)**

7. Shumaker's permit contains a new sub-lethal Whole Effluent Toxicity (WET) limit. A sub-lethal WET limit involves exposing two aquatic organisms (*Pimephales promelas* which is the fathead minnow and *Ceriodaphni dubia* the water flea) to wastewater effluent in the laboratory to determine whether the organisms display sub-lethal effects such as impaired growth or reproduction. While Shumaker's expired permit did not contain a sub-lethal WET limit, it did require sub-lethal testing. In past tests, Shumaker has experienced occasional sub-lethal effects, primarily on one organism (the water flea), although there have been limited sub-lethal effects demonstrated on the fathead minnow. It appears that those effects were likely due to the presence of natural pathogens, something not regulated through the WET testing process.

8. The sub-lethal WET limit compliance schedule contained in the draft permit was approximately twelve (12) months. In its comments on the draft permit, Shumaker requested a three (3) year compliance schedule for this new sub-lethal limit due to the fact it is a new water quality based permit limit. In its final decision, ADEQ agreed to include a three (3) year compliance schedule for sub-lethal testing on the

fathead minnow but did not alter the approximate one (1) year compliance schedule for the water flea.

9. ADEQ's rationale for differing compliance schedules is based on its position that a Toxicity Reduction Evaluation ("TRE") "is being performed on both lethal (survival) and sub-lethal (reproduction) endpoints on the [water flea]." See ADEQ's Response to Comments, p. 3.

10. The TRE was developed to address lethal test failures, not sub-lethal failures as there was no sub-lethal permit limit in the previous permit. At the time Shumaker developed its TRE plan (which ADEQ approved), there was no existing permit limit for sub-lethal toxicity and the TRE Plan was implemented to address the permit violations of the lethal endpoint. There were no violations for a non-existing sub-lethal permit limit.

11. Since the permit limit for sub-lethal toxicity for both organisms contained in the permit represents a new water quality based permit limit, Shumaker should be afforded a three (3) year (36 month) compliance schedule for both organisms.

Issue 2. Request for Reduction in Monitoring Frequency

12. Shumaker's previous permit allowed for the reduction in monitoring frequency should it be demonstrated that WET testing confirmed no potential for WET test failures (Section 4.F. on Page 10 of Part II in expired permit). In its comments on the draft permit, Shumaker requested a provision to allow for a reduction in monitoring frequency in the event Shumaker complies with its WET limits on a consistent basis.

13. ADEQ rejected this request due to what it describes as a history of test failures. It now appears the test failures Shumaker has experienced (both lethal and sub-lethal) may be caused by naturally occurring pathogens not associated with the effluent or

wastewater treatment activities under Shumaker's control. If that is confirmed in subsequent testing, and there are no failures due to effluent toxicity, then Shumaker should be eligible for a reduction in WET testing frequency, both for lethal and sub-lethal effects.

Issue 3. Condition 5 of Part II. Financial Assurance Requirement.

14. ADEQ has previously required Shumaker to obtain a letter of credit for financial assurance pursuant to Ark. Code Ann. § 8-4-203. This law was amended by Act 575 of 2015 which provides that wastewater treatment facilities "that continuously operate due to a connection with a city, town, county, or sewer improvement district" are no longer required to obtain financial assurance.

15. Shumaker treats municipal wastewater from the City of East Camden, Arkansas and must "continuously operate due to a connection with a city." When Act 575 becomes effective later this summer, Shumaker will no longer be required to obtain financial assurance. Paragraph 5 in Part II requires Shumaker to renew its letter of credit on or before April 23, 2019.

16. Since Act 575 was enacted after the public comment period, Shumaker could not have raised this issue in its public comments.

17. The permit should be revised to remove any requirement for financial assurance beyond the effective date of Act 575.

Issue 4: Requirement to Finalize Copper WER

18. Conditions 7 and 8 of Part II, provide:

7. The permittee shall finalize the Draft Site Specific Copper Water Effect Ratio (Draft WER) by using the general outline of the WER process as follows:

A. Permittee addresses the EPA's technical comments dated 2/22/2008 on the Draft WER (prepared by AquAeTer dated September 2007). The technical comments must be adequately addressed to ADEQ's satisfaction.

B. Permittee submits final revised WER to ADEQ for review no later than 60 days after permit effective date.

C. If no further comments, ADEQ adds Final WER to APC&EC Regulation No. 2 in next triennial review or the facility may choose to move forward with third party rulemaking.

Upon ADEQ approval of a final WER, the Department will use the final approved Copper WER in all future reasonable potential evaluations for the necessity of Copper effluent limitations.

8. The permittee submitted a Toxicity Reduction Evaluation (TRE) plan in June 2014 due to lethal and sub-lethal whole effluent toxicity failures for *C. dubia*. The TRE plan was approved on 9/16/2014 which includes milestone schedule dates and a final compliance date of 3/22/2016 for sub-lethal WET limits for *C. dubia*. In the event that the TRE identifies Copper as a causal toxicant to whole effluent toxicity lethal or sub-lethal test failures in the effluent, the permit can be reopened in accordance with Part II.2 to reevaluate the site specific Copper WER and/or include appropriate effluent limits for Copper in the permit. The permit can also be reopened in accordance with Part II.2 to include appropriate effluent limits for Copper in the event that a final site specific Copper WER is not approved or if effluent data poses reasonable potential to exceed a site specific Copper WER value.

19. This issue has a long history. Shumaker's NPDES permit was renewed on July 31, 2003. In the 2003 permit, ADEQ included a three year "report only" interim limit for copper, final copper limits and a schedule of compliance that included a corrective action plan for copper. The Statement of Basis accompanying the 2003 permit renewal, at pp. 9-10, provides:

Standards for Chromium (VI), Mercury, Selenium, and Cyanide are expressed as a function of the pollutant's water-effect ratio (WER), while standards for cadmium, chromium (III), copper, lead, nickel, silver, and zinc are expressed as a function of the pollutant's water-effect ratio, and as a function of hardness.

The **Water-effect ratio (WER)** is assigned a value of 1.0 unless scientifically defensible study clearly demonstrates that a value less than 1.0 is necessary or a value greater than 1.0 is sufficient to fully protect the designated uses of the receiving stream from the toxic effects of the pollutant.

The WER approach compares bioavailability and toxicity of a specific pollutant in receiving water and in laboratory test water. It involves running toxicity tests for at least two species, measuring LC50 for the pollutant using the local receiving water collected from the site where the criterion is being implemented, and laboratory toxicity testing water made comparable to the site water in terms of chemical hardness. The ratio between site water and lab water LC50 is used to adjust the national acute and chronic criteria to site specific values.

20. Shumaker completed its corrective action plan for copper within the two (2) year period required by the permit. However, instances remained when copper concentrations in Shumaker's effluent exceeded the final permit limits (which were extremely low). ADEQ suggested to Shumaker that it consider developing a site specific WER to determine whether the default WER value of 1.0 was appropriate for the receiving stream.

21. In 2006, Shumaker hired AquaEter to perform a WER for copper. AquaEter submitted a WER work plan that EPA and ADEQ approved. AquaEter completed a draft WER and submitted it to ADEQ in September of 2007. ADEQ approved the draft WER and forwarded it to EPA on or about January 23, 2008. EPA provided comments on the WER on or about February 22, 2008. Sarah Clem of ADEQ received EPA's comments but did not share those comments with Shumaker or anyone else at ADEQ for a period of nearly ten (10) months.

22. Shumaker submitted an application to renew its NPDES permit on March 4, 2008. ADEQ deemed Shumaker's application administratively complete on March 11, 2008.

23. On December 6, 2008, Shane Byrum of ADEQ contacted Fred Oswald, Shumaker's engineer, and told Mr. Oswald that EPA's comments were on the way and that Ms. Clem had delayed sharing these with Mr. Byrum since receiving them in February of 2008. The gist of EPA's technical comments on the WER was that conditions during one of the sampling events (the "second study sampling event") were not representative due to higher flows and TSS concentrations. EPA stated:

Given the above considerations, EPA strongly recommends that the final WER be based only upon the WER determined from the first WER study event (final WER = 11.8717). Information provided on page 34 of EPA's streamlined WER guidance, as well as information presented in pages 10-12 of EPA's 1994 interim WER guidance, support the use of this approach. Furthermore, in reviewing the draft study report, EPA utilized a final WER value of 11.8717 to conduct reasonable potential calculations for copper (using assumptions provided in the factsheet associated with Shumaker's NPDES permit effective on September 1, 2003). From these calculations, it appears that use of a final WER of 11.8717 in deriving site-specific copper criteria for Two Bayou Creek should result in a determination of no reasonable potential for impairment of the aquatic life use due to copper for the facility's discharge.

24. On December 12, 2008, Shumaker representatives met with ADEQ staff at which time ADEQ staff indicated that if Shumaker would accept EPA's recommendation to eliminate the second study event from the WER determination, it would remove the copper limit from Shumaker's permit based on a WER of 11.8717. Shumaker agreed to ADEQ's proposal.

25. ADEQ issued a NPDES permit to Shumaker on March 31, 2009, effective April 1, 2009 (the "2009 permit"). With regard to the copper limit, the statement of basis explains ADEQ's rationale for removing copper limits. At p. 2 under "Significant Changes," ¶ 9, it states, "Copper limits and monitoring requirements were removed based on a water-effect ratio (WER) study dated September 2007." At p. 8 it states that, "A

streamlined Copper Water-Effect ratio (WER) study was performed in 2007 by AquaEter which determined that the WER for copper applicable to this facility is 11.8717.” The permit did not require Shumaker to take any further action in regard to the WER or EPA’s comments, nor did it require that the WER value for copper to be incorporated into Regulation No. 2.

26. Now, over six (6) years after accepting Shumaker’s WER and issuing a permit based on a WER value that ADEQ accepted, ADEQ has issued a renewal permit that requires Shumaker to revise the WER it previously accepted to its “satisfaction,” subjecting the WER to “further comments” (whatever that means) at which time it may or may not grant “approval of a final WER” (notwithstanding the fact it relied on this WER to remove the copper limit from Shumaker’s permit over six years ago.) Shumaker conducted the WER at considerable expense, ADEQ accepted it and issued a permit utilizing the WER value that was established and approved by ADEQ to justify removing Shumaker’s copper limit. ADEQ should not be allowed to rescind its decision based on its failure to document final approval or include it in earlier revisions of Regulation No. 2. Condition 7 of Part II should be eliminated.

27. In addition, Condition 8 of Part II purports to give ADEQ the option of reestablishing a copper limit in the event the TRE demonstrates a WET lethal or sub-lethal failure based on copper toxicity. Since the draft permit was issued and the public comment period closed, it has been determined that WET test failures are due to naturally occurring pathogens not associated with the effluent or wastewater treatment activities under Shumaker’s control. Despite years of testing, there is nothing to indicate that copper (or any other toxic substance for that matter) is responsible for WET test failures. The copper reopener does not have any basis in fact but instead rests on ADEQ’s

speculation that copper may possibly be causing or contributing to WET test failures. As such, Condition 8 should be eliminated.

28. Pursuant to Ark. Code Ann. § 8-4-205(c)(6) and APCEC Regulation No. 8, § 8.612(A)(2), those portions of Shumaker's permit that are challenged are automatically stayed.

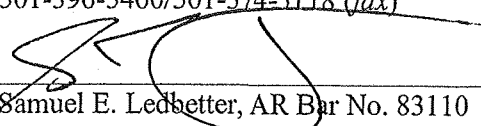
WHEREFORE, Shumaker prays that its request for hearing be granted and that the Commission enter an order that:

- a. Modifies the permit to provide for a three (3) year compliance schedule for sub-lethal WET limits;
- b. Modifies the permit to provide for a reduction in monitoring frequency if Shumaker establishes compliance with WET limits on a consistent basis;
- c. Removes any requirement for financial assurance following the effective date of Act 575;
- d. Removes the requirements contained in Conditions 7 & 8 of Part II; and
- e. Grants Shumaker all other relief to which it is entitled.

Dated this 10th day of June, 2015.

Respectfully submitted:

McMATH WOODS P.A.
711 West Third Street
Little Rock, Arkansas 72201
501-396-5400/501-374-5118 (fax)

By 
Samuel E. Ledbetter, AR Bar No. 83110

CERTIFICATE OF SERVICE

I, Samuel E. Ledbetter, do hereby certify that I have served a copy of this Request for Commission Review and Adjudicatory Hearing regarding Permit No. AR0034363 to the following on this 10th day of June, 2015:

Becky Keogh, Director
Arkansas Department of
Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

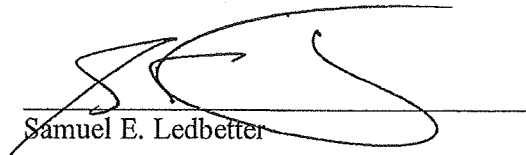
via Certified Mail No. 70121010000254658222
Return Receipt Requested

Ellen Carpenter, Water Division Manager
Arkansas Department of
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Lorielle Gutting, Chief, Legal Division
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Samuel E. Ledbetter