Permit number: AR0036692

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.),

City of Mena 323 Polk 53 Mena, AR 71953

is authorized to discharge from a facility located as follows: approximately 1.5 miles southeast of Mena on County Road 53 about a mile east of Arkansas Highway 8, in Section 22, Township 2 South, Range 30 West in Polk County, Arkansas.

Latitude: 34° 33' 46"; Longitude: 94° 11'12"

to receiving waters named:

unnamed tributary of Prairie Creek, thence to Prairie Creek, thence to the Ouachita River in Segment 2F of the Ouachita River Basin.

The outfall is located at the following coordinates:

Outfall 001: Latitude: 34° 33' 46"; Longitude: 94° 11' 12"

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

Response to comments is attached to this permit.

This permit shall become effective on

This permit is issued on

This permit and the authorization to discharge shall expire at midnight,

Martin Maner, P.E.
Chief, Water Division
Arkansas Department of Environmental Quality

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PART I PERMIT REQUIREMENTS

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

During the period beginning on effective date and lasting until date of expiration, the permittee is authorized to discharge from outfall serial number 001. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	haracteristics <u>Discharge Limitations</u>			Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified) Monthly Avg.	(mg/l	entration , unless e specified) 7-Day Avg.	Frequency	Sample Type
Flow ¹	N/A	Report	Report	once/day	totalizing meter
Carbonaceous Biochemical Oxygen Demand (CBOD5)	259	10	15	three/week	6-hr composite
Total Suspended Solids (TSS)	388	15	22.5	three/week	6-hr composite
Ammonia Nitrogen (NH3-N)					
(April)	55	2.1	5.2	three/week	6-hr composite
(May-Oct)	55	2.1	4.5	three/week	6-hr composite
(Nov-March)	153	5.9	12	three/week	6-hr composite
Dissolved Oxygen ²	N/A	7.1, (Monthly Avg. Min.)		three/week	grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
	N/A	1000	2000	three/week	grab
Total Residual Chlorine (TRC) ³	N/A	<0.1 mg/l (Inst. Max.)		three/week	grab
рН	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	three/week	grab
Whole Effluent Lethality (7-day NOEC) ^{4, 5}	Daily Avg. Minimum Not <100%	7-day Minimum Not <100%		once/quarter	24-hr composite
Pimephales promelas (Chronic) ⁴ Pass/Fail Lethality (7-day NOEC) TLP6C Pass/Fail Growth (7-day NOEC)TGP6C Survival (7-day NOEC) TOP6C Coefficient of Variation TQP6C Growth (7-day NOEC) TPP6C	7-Day Average Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report %			once/quarter once/quarter once/quarter once/quarter once/quarter	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite
Ceriodaphnia dubia (Chronic) ⁴ Pass/Fail Lethality (7-day NOEC) TLP3B Pass/Fail Reprod. (7-day NOEC)TGP3B Survival (7-day NOEC) TOP3B Coefficient of Variation TQP3B Reproduction (7-day NOEC) TPP3B	7-Day Average Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report %			once/quarter once/quarter once/quarter once/quarter once/quarter	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite

- 1 Report monthly average and daily maximum as MGD.
- 2 See item #27(a) of Part IV(Dissolved Oxygen).
- 3 See Condition No. 8 of Part III. (TRC Condition)
- 4 See Condition No. 9 of Part III (Biomonitoring Condition)

There shall be no discharge of distinctly visible solids, scum or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit.

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SECTION B. SCHEDULE OF COMPLIANCE

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

Compliance is required on the effective date of the permit.

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PART II STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

1. <u>Duty to Comply</u>

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any values reported in the required Discharge Monitoring Report, which are in excess of an effluent limitation specified in Part I shall constitute evidence of violation of such effluent limitation and of this permit.

2. Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount, as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

3. Permit Actions

This permit may be modified, revoked and reissued, or terminated for causes including, but not limited to the following:

- a. Violation of any terms or conditions of this permit; or
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
- e. Failure of the permittee to comply with the provisions of APCEC Regulation No. 9 (Permit fees) as required by Condition II A.10 herein.

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The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4. <u>Toxic Pollutants</u>

Notwithstanding Part II.A.3., if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Regulation No. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas) or Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standards or prohibition and the permittee so notified.

The permittee shall comply with effluent standards, narrative criteria, prohibitions established under Regulation No. 2 (Arkansas Water Quality Standards), as amended, or Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. <u>Civil and Criminal Liability</u>

Except as provided in permit conditions on "Bypassing" (Part II.B.4.a.), and "Upsets" (Part II.B.5.b), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state and federal statues or regulations which defeats the regulatory purposes of the permit may subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

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8. **Property Rights**

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

9. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Permit Fees

The permittee shall comply with all applicable permit fee requirements for wastewater discharge permits as described in APCEC Regulation No. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5 (d), as adopted in APCEC Regulation No. 6 and the provisions of APCEC Regulation No. 8.

SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. **Proper Operation and Maintenance**

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- b. The permittee shall provide an adequate operating staff, which is duly qualified to carryout operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

2. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee

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shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment, or the water receiving the discharge.

4. **Bypass of Treatment Facilities**

a. Bypass not exceeding limitation.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B 4.b.and 4.c.

b. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.D.6 (24-hour notice).

c. Prohibition of bypass

- (1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal or preventive maintenance; and
 - (c) The permittee submitted notices as required by Part II.B.4.b.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Part II.B.4.c(1).

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5. <u>Upset Conditions</u>

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part II.B.5.b of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset.
 - (2) The permitted facility was at the time being properly operated.
 - (3) The permittee submitted notice of the upset as required by Part II.D.6.: and
 - (4) The permittee complied with any remedial measures required by Part II.B.3.
- c. Burden of proof. In any enforcement proceeding the permittee, seeking to establish the occurrence of an upset has the burden of proof.

6. **Removed Substances**

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State. Written approval must be obtained from the ADEQ for land application only.

7. **Power Failure**

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

SECTION C – MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director. Intermittent discharges shall be monitored.

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2. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +/-10% from true discharge rates throughout the range of expected discharge volumes and shall be installed at the monitoring point of the discharge.

3. **Monitoring Procedures**

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. At a minimum, spikes and duplicate samples are to be analyzed on 10% of the samples.

4. **Penalties for Tampering**

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Permittees are required to use preprinted DMR forms provided by ADEQ, unless specific written authorization to use other reporting forms is obtained from ADEQ. Monitoring results obtained during the previous calendar month shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month, following the completed reporting period to begin on the effective date of the permit. Duplicate copies of DMR forms signed and certified as required by Part II.d.11 and all other reports required by Part II.D. (Reporting Requirements), shall be submitted to the Director at the following address:

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NPDES Enforcement Section Water Division Arkansas Department of Environmental Quality 8001 National Drive P.O. Box 8913 Little Rock, AR 72219-8913

If permittee uses outside laboratory facilities for sampling and/or analysis, the name and address of the contract laboratory shall be included on the DMR.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated on the DMR.

7. **Retention of Records**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

8. **Record Contents**

Records and monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements, and preservatives used, if any;
- b. The individuals(s) who performed the sampling or measurements;
- c. The date(s) and time analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The measurements and results of such analyses.

9. **Inspection and Entry**

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

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- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample, inspect or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D – REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice and provide plans and specification to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:

For Industrial Dischargers

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b).
- b. The alternation or addition could significantly change the nature or increase the quality of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR Part 122.42 (a)(1).

For POTW Dischargers:

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that cause violation of the effluent limitations specified herein.

2. **Anticipated Noncompliance**

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

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3. <u>Transfers</u>

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. **Monitoring Reports**

Monitoring results shall be reported at the intervals and in the form specified in Part II.C.5. (Reporting). **Discharge Monitoring Reports must be submitted** even when no discharge occurs during the reporting period.

5. <u>Compliance Schedule</u>

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-four Hour Report

- a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain the following information:
 - (1) a description of the noncompliance and its cause;
 - (2) the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (3) steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- b. The following shall be included as information which must be reported within 24 hours:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Any upset which exceeds any effluent limitation in the permit and
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit to be reported within 24 hours to the ADEQ Enforcement Section of Water Division.
- c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours to the ADEQ Enforcement Section of Water Division.

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7. **Other Noncompliance**

The permittee shall report all instances of noncompliance not reported under Part II.D.4,5 and 6, at the time monitoring reports are submitted. The reports shall contain the information listed at Part II.D.6.

8. Changes in Discharge of Toxic Substances for Industrial Dischargers

The permittee shall notify the Director as soon as he/she knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, in a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(1).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(2).

9. **Duty to Provide Information**

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. Information shall be submitted in the form, manner and time frame requested by the Director.

10. **Duty to reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated in APCEC Regulation No. 6.

11. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified as follows:

a. All **permit applications** shall be signed as follows:

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- (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (ii) The manager of one or more manufacturing, production, or operation facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency; by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) The chief executive officer of the agency; or
 - (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. All **reports** required by the permit and **other information** requested by the Director shall be signed by a person described above or by a duly authorized representative of that person.

A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;
- (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- (3) The written authorization is submitted to the Director.
- c. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

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penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. **Availability of Reports**

Except for data determined to be confidential under 40 CFR Part 2 and Regulation 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Arkansas Air and Water Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.A.2 and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

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PART III OTHER CONDITIONS

- 1. The operator of this wastewater treatment facility shall be a licensed as Class III by the State of Arkansas in accordance with Act 211 of 1971, Act 1103 of 1991, Act 556 of 1993, and Regulation No. 3, as amended.
- 2. For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand (BOD5) or Carbonaceous Biochemical Oxygen Demand (CBOD5) shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.102, as adopted by reference in APCEC Regulation No. 6.
- 3. Produced sludge shall be disposed of by land application only when meeting the following criteria:
 - a. Sewage sludge from treatment works treating domestic sewage (TWTDS) must meet the applicable provisions of 40 CFR Part 503; and
 - b. The sewage sludge has not been classified as a hazardous waste under state or federal regulations.
- 4. The permittee shall give at least 120 days prior notice to the Director of any change planned in the permittee's sludge disposal practice or land use applications, including types of crops grown (if applicable).
- 5. The permittee shall report all overflows with the Discharge Monitoring report (DMR) submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of overflow; observed environmental impacts from the overflow; action taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary.) Overflows which endanger health or the environment shall be orally reported to this department (Enforcement Section of Water Division), within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment, shall be provided within 5 days of the time the permittee becomes aware of the circumstance.
- 6. In accordance with 40 CFR Parts 122.62 (a) (2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body, or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit

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issuance that would have justified the application of different permit conditions at the time of the permit issuance.

7. Other Specified Monitoring Requirements

The permittee may use alternative appropriate monitoring methods and analytical instruments other than as specified in Part I Section A of the permit without a major permit modification under the following conditions:

- The monitoring and analytical instruments are consistent with accepted scientific practices;
- The requests shall be submitted in writing to the NPDES Section of the Water Division of the ADEQ for use of the alternate method or instrument.
- The method and/or instrument is in compliance with 40 CFR 136 or acceptable to the Director; and
- All associated devices are installed, calibrated, and maintained to insure the accuracy of
 the measurements and are consistent with accepted capability of that type of device. The
 calibration and maintenance shall be performed as part of the permittee's laboratory
 Quality Control/Quality Assurance program.

Upon written approval of the alternative monitoring method and/or analytical instruments, these methods or instruments must be consistently utilized throughout the monitoring period. ADEQ must be notified in writing and the permittee must receive written approval from ADEQ, if the permittee decides to return to the original permit monitoring requirements.

8. If TRC test results are less than Detection Level Achieved (DL), a value of zero (0) may be used for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

Total residual chlorine (TRC) in the effluent composite sample shall be measured and reported both at the time of sample termination and at the time of toxicity test initiation. The permittee shall ensure that the effluent composite used in toxicity testing is representative of normal facility residual chlorine discharge concentration.

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9. **WHOLE EFFLUENT TOXICITY TEST REQUIREMENT** (WET Limits, 7 DAY CHRONIC, FRESHWATER)

1. <u>SCOPE AND METHODOLOGY</u>

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S): 001

REPORTED ON DMR AS OUTFALL: TX1Q

CRITICAL DILUTION: 100%

EFFLUENT DILUTION SERIES: 32%, 42%, 56%, 75%, 100%

TEST SPECIES/METHODS: 40 CFR Part 136

<u>Ceriodaphnia dubia</u> chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving adults in the control produce three broods.

<u>Pimephales promelas</u> (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.
- c. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effluent Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in Part I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

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d. This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

e. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. <u>Test Acceptance</u>

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- ii. The mean number of <u>Ceriodaphnia dubia</u> neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- iii. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test, the growth and survival of the Fathead minnow test.
- v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, <u>unless</u> significant lethal or nonlethal effects are exhibited for: the young of surviving females in the <u>Ceriodaphnia dubia</u> reproduction test; the growth and survival endpoints in the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

i. For the <u>Ceriodaphnia dubia</u> survival test, the statistical analyses used to determine if there is a significant difference between the control and the

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critical dilution shall be Fisher's Exact Test as described in EPA/600/4-91/002, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

ii. For the <u>Ceriodaphnia dubia</u> reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-91/002, or the most recent update thereof.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
- A. a synthetic dilution water control which fulfills the test acceptance requirements of Item 2.a. was run concurrently with the receiving water control;
- B. the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
- C. the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3.a. below; and

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D. the synthetic dilution water shall have a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a. above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.
- ii. The permittee shall collect second and third 24-hour composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping and/or storage.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3. of this section.
- v. <u>MULTIPLE OUTFALLS</u>: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the 24-hour composite

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effluent samples in proportion to the average flow from the outfalls listed in item 1.a. above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

vi. At the time of sample collection the permittee shall measure the TRC of the effluent. The measured concentration of TRC for each sample shall be included in the lab report submitted by the permittee. The permittee shall not allow the sample to be dechlorinated prior to delivery to the laboratory nor at the laboratory.

3. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/600/4-91/002, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C. of this permit. The permittee shall submit full reports only upon the specific request of the Department.
- b. The permittee shall report the Whole Effluent Lethality values for the 30-Day Average Minimum and the 7-Day Minimum under Parameter No. 22414 on the DMR for that reporting period.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

If more than one species is tested during the reporting period, the permittee shall report the <u>lowest</u> 30-Day Average Minimum NOEC and the <u>lowest</u> 7-Day Minimum NOEC for Whole Effluent Lethality.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. Only <u>ONE</u> set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the <u>LOWEST</u> Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for review.

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c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR

i. **Pimephales promelas** (Fathead Minnow)

- A. If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.
- B. Report the NOEC value for survival, Parameter No. TOP6C.
- C. Report the NOEC value for growth, Parameter No. TPP6C.
- D. If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.
- E. Report the highest (Critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

- A. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.
- B. Report the NOEC value for survival, Parameter No. TOP3B.
- C. Report the NOEC value for reproduction, Parameter No. TPP3B.
- D. If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.
- E. Report the highest (Critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.

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10. Contributing Industries and Pretreatment Requirements

- A. The following pollutants may not be introduced into the treatment facility:
 - 1. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
 - 2. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;
 - 3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
 - 4. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
 - 5. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 deg. C (104 deg. F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
 - 6. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - 7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
 - 8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- B. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.
- C. The permittee shall sample, analyze and report the wastewater plant's influent (prior to any return activated sludge or other treatment mixing streams), the plant's effluent after final treatment and sludge (dry weight basis) once/month for Molybdenum and the parameters in Table III, 40 CFR 122 Appendix D using EPA approved methods in 40

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CFR 136. This monitoring and reporting requirement shall be for a one (1) year period from the effective date of this permit for a total of twelve (12) monthly reports.

The permittee shall sample and analyze representative domestic background wastewater for the same parameters as above once/two (2) months over this same period of time for a total of six (6) reports.

The reports shall be sent to the attention of the ADEQ Pretreatment Coordinator denoting samples as 24 hour composites (time or flow weighted) or grab when not applicable (Cyanide, Phenols, etc.) or deemed unfeasible. Attachment 3 is the table of quantitation levels (MQL) that shall be required of your ADEQ certified lab(s).

- D. The permittee shall provide adequate notice to the Department of the following:
 - 1. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
 - 2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
 - 3. Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

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PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

- 1. "Act" means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
- 2. "Administrator" means the Administrator of the U.S. Environmental Protection Agency.
- 3. "Applicable effluent standards and limitations" means all State and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
- 4. "Applicable water quality standards" means all water quality standards to which a discharge is subject under the federal Clean Water Act and which has been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under regulation No. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas.)
- 5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 6. **"Daily Discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. *Mass Calculations:* For pollutants with limitations expressed in terms of mass, the "daily

discharge" is calculated as the total mass of pollutant discharged over the sampling day. *Concentration Calculations*: For pollutants with limitations expressed in other units of measurement, determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all the

samples collected during that sampling day by using the following formula: where C= daily concentration, F=daily flow and n=number of daily samples; daily average discharge

$$\frac{C_1F_1+C_2F_2+\cdots C_nF_n}{F_1+F_2+\cdots F_n}$$

- 7. "Monthly average" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. For Fecal Coliform Bacteria (FCB) report the monthly average see 30-day average below.
- 8. "Daily Maximum" discharge limitation means the highest allowable "daily discharge" during the calendar month. The 7-day average for fecal coliform bacteria is the geometric mean of the values of all effluent samples collected during the calendar week in colonies/100 ml.

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- 9. "Department" means the Arkansas Department of Environmental Quality (ADEQ).
- 10. "Director" means the Administrator of the U.S. Environmental Protection Agency and/or the Director of the Arkansas Department of Environmental Quality.
- 11. "Grab sample" means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
- 12. "Industrial User" means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly-owned treatment works.
- 13. "National Pollutant Discharge Elimination System" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318 and 405 of the Clean Water Act.
- 14. "POTW" means a Publicly Owned Treatment Works.
- 15. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in products.
- 16. "APCEC" means the Arkansas Pollution Control and Ecology Commission.
- 17. "Sewage sludge" means the solids, residues, and precipitate separated from or created in sewage by the unit processes a publicly-owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff that are discharged to or otherwise enter a publicly-owned treatment works.
- 18. "7-day average" discharge limitation, other than for fecal coliform bacteria, is the highest allowable arithmetic means of the values for all effluent samples collected during the calendar week. The 7-day average for fecal coliform bacteria is the geometric mean of the values of all effluent samples collected during the calendar week in colonies/100 ml. The DMR should report the highest 7-day average obtained during the calendar month. For reporting purposes, the 7-day average values should be reported as occurring in the month in which the Saturday of the calendar week falls in.
- 19. "30-day average", other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
- For Fecal Coliform Bacteria (FCB) report the monthly average as a 30-day geometric mean in colonies per 100 ml.
- 20. **"24-hour composite sample"** consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
- 21. "12-hour composite sample" consists of 12 effluent portions, collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.

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- 22. "6-hour composite sample" consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
- 23. "3-hour composite sample" consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
- 24. "Treatment works" means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.
- 25. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. Any upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack or preventive maintenance, or careless of improper operations.
- 26. "For Fecal Coliform Bacteria", a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For Fecal Coliform Bacteria (FCB) report the monthly average as a 30-day geometric mean in colonies per 100 ml.
- 27. "Dissolved oxygen limit" shall be defined as follows:
 - a. When limited in the permit as a monthly average minimum, shall mean the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month;
 - b. When limited in the permit as an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
- 28. The term "MGD" shall mean million gallons per day.
- 29. The term "mg/l "shall mean milligrams per liter or parts per million (ppm).
- 30. **The term "μg/l"** shall mean micrograms per liter or parts per billion (ppb).
- 31. The term "cfs" shall mean cubic feet per second.
- 32. **The term "ppm"** shall mean parts per million.
- 33. The term "s.u." shall mean standard units.
- 34. Monitoring and Reporting:

When a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date. Where the monitoring requirement for an effluent characteristic is Monthly or more frequently, the Discharge Monitoring Report shall be submitted by the 25th of the month following the sampling. Where the monitoring requirement for an effluent characteristic is Quarterly, Semi-Annual, Annual, or Yearly, the Discharge Monitoring report shall be submitted by the 25th of the month following the monitoring period end date.

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MONTHLY:

is defined as a calendar month or any portion of a calendar month for monitoring requirement frequency of once/month or more frequently.

OUARTERLY:

- (1) is defined as a fixed calendar quarter or any part of the fixed calendar quarter for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December; or
- (2) is defined as a fixed three month period (or any part of the fixed three month period) of or dependent upon the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not coincide with the fixed calendar quarter. Seasonal calendar quarters are: May through July, August through October, November through January, and February through April.

SEMI-ANNUAL:

is defined as the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months or twice/year.

ANNUAL or YEARLY:

is defined as a fixed calendar year or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.

Fact Sheet

for renewal of draft NPDES Permit Number AR0036692 to discharge to Waters of the State

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality 8001 National Drive Post Office Box 8913 Little Rock, Arkansas 72219-8913

2. APPLICANT.

The applicant is:

City of Mena 323 Polk 53 Mena, AR 71953

3. PREPARED BY.

The permit was prepared by:

Shane Byrum NPDES Branch, Water Division

4. **DATE PREPARED.**

The permit was prepared on 01/11/2006.

5. PREVIOUS PERMIT ACTIVITY.

Effective Date: 03/01/2001

Modification Date: N/A

Expiration Date: 02/28/2006

The permittee submitted a permit renewal application on 07/20/2005. It is proposed that the current NPDES permit be reissued for a 5-year term in accordance with regulations promulgated at 40 CFR Part 122.46(a).

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6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfall is located at the following coordinates:

Latitude: 34° 33' 46" Longitude: 94° 11' 12"

The receiving waters named:

unnamed tributary of Prairie Creek, thence to Prairie Creek, thence to the Ouachita River in Segment 2F of the Ouachita River Basin. The receiving stream is a Water of the State classified for secondary contact recreation, raw water source for public, industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

a. 303d List and Endangered Species Considerations

i. **303d List**

The receiving stream (an unnamed tributary of Prairie Creek) is not listed on the 303d list, but Prairie Creek is listed on the 303d list under category 5d for not supporting the aquatic life use. The major cause is listed as siltation/turbidity, and the major source is listed as unknown. Category 5d contains waters which need data verification to confirm use impairment before a TMDL is scheduled. Therefore, no permit action is needed at this time.

ii. Endangered Species:

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS). Therefore no permit action is needed. The drafted permit and Fact Sheet will be sent to the USF&WS for their review.

7. OUTFALL AND TREATMENT PROCESS DESCRIPTION.

The following is a description of the facility described in the application:

- a. Design Flow: 3.1 MGD
- b. Type of treatment: 2-cell aerated lagoon followed by rapid sand filtration, chlorine disinfection, and post aeration
- c. Discharge Description: treated municipal wastewater

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A quantitative and qualitative description of the discharge described in the NPDES Permit Application Forms received 07/20/2005 are available for review.

8. INDUSTRIAL WASTEWATER CONTRIBUTIONS.

a. INDUSTRIAL USERS

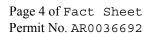
The permittee receives process wastewater from significant industrial users. However, the Department has made the decision based on several criteria that the POTW will not be required to develop an approved pretreatment program at this time. Standard boilerplate Pretreatment Prohibitions (40 CFR 403.5[b]) and additional monitoring/reporting requirements to determine the potential need for local limits per 40 CFR 403.5(c)(2) are deemed appropriate at this time.

9. SEWAGE SLUDGE PRACTICES.

Sludge generated by the treatment process remains in the lagoons and removed as needed. The facility removed the sludge from the lagoons and land applied it in 2004.

10. PERMIT CONDITIONS.

The Arkansas Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application. Permit requirements are based on NPDES regulations (40 CFR Parts 122, 124, and Subchapter N), the National Pretreatment Regulation in 40 CFR 403 and regulations promulgated pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et. seq.).





a. Final Effluent Limitations

Outfall 001- treated municipal wastewater

i. Conventional and/or Toxic Pollutants

Effluent Characteristics	<u>Discharge Limitations</u>			Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified) Monthly Avg.	Concentration (mg/l, unless otherwise specified) Monthly 7-Day Avg. Avg.		Frequency	Sample Type
Flow (MGD)	N/A	Report	Report	once/day	totalizing meter
Carbonaceous Biochemical Oxygen Demand (CBOD5)	259	10	15	three/week	6-hr composite
Total Suspended Solids (TSS)	388	15	22.5	three/week	6-hr composite
Ammonia Nitrogen (NH3-N)					
(April)	55	2.1	5.2	three/week	6-hr composite
(May-Oct)	55	2.1	4.5	three/week	6-hr composite
(Nov-March)	153	5.9	12	three/week	6-hr composite
Dissolved Oxygen	N/A	7.1 (Monthly Avg. Min)		three/week	Grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
	N/A	1000	2000	three/week	Grab
Total Residual Chlorine (TRC)	N/A	<0.1 mg/l (Inst. Max.)		three/week	Grab
рН	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	three/week	Grab
Chronic Biomonitoring	N/A	See Section #14 below		once/quarter	24-hr composite

ii. **Solids, Foam, and Free Oil:** There shall be no discharge of distinctly visible solids, scum or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

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11. BASIS FOR PERMIT CONDITIONS.

The following is an explanation of the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons suggesting the tentative decisions as required under 40 CFR 124.7 (48 FR 1413, April 1, 1983).

Technology-Based versus Water Quality-Based Effluent Limitations and Conditions

Following regulations promulgated at 40 CFR Part 122.44 (1) (2) (ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR Part 122.44 (a) or on State water quality standards and requirements pursuant to 40 CFR Part 122.44 (d), whichever are more stringent.

1. Technology-Based Effluent Limitations and/or Conditions

The permit must at least comply with 40 CFR 133 (Secondary Treatment Regulation) when applicable.

2. State Water Quality Numerical Standards Based Limitations

The monthly average water quality-based limits for CBOD5, TSS, and DO have been based on the current NPDES permit, and 40 CFR Part 122.44(l). The calculation of the loadings (lbs per day) uses a design flow of 3.1 MGD and the following equation (See below). These limitations are included in the updated Arkansas Water Quality Management Plan (AWQMP). Fecal Coliform Bacteria and pH limitations are based on chapter 5, Sections 2.507 and 2.504 of Regulation No. 2 as amended, respectively. Daily Maximum of DO based limits = Monthly average of DO based limits X 1.5

lbs/day = Concentration (mg/l) X Flow (MGD) X 8.34

Ammonia-Nitrogen (NH3-N)

The water quality effluent limitations for Ammonia are based on either DO-based effluent limits or on toxicity-based standards, whichever are more stringent.

The toxicity-based effluent limitations are based on Chapter 5, Section 2.512 of Regulation No. 2 and memo dated March 28, 2005. The following formula has been used to calculate toxicity based Ammonia limits:

$$Cd = (IWC(Qd + Qb) - CbQb)/Qd$$

Where:

Cd = effluent limit concentration (mg/l)

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IWC = Ammonia toxicity standard for Ecoregion

Qd = design flow = 3.1 MGD = 4.8 cfs

The 7Q10 of 0 cfs is based on "Identification and Classification of Perennial Stream of Arkansas", Arkansas Geological Commission Map

Qb = Critical flow of the receiving stream = 0 cfs. This flow is 67 percent of the 7-day, 10-year low-flow (7Q10) for the receiving stream.

Cb = background concentration = 0 mg/l

The following pH and temperature were used for Ouachita Mountain Ecoregion:

Month	рН	Temperature	IWC	IWC
	s.u.	C	(Monthly Avg)	(7-day Avg*)
April-October	7.1	30	2.1 mg/l	5.2 mg/l
November –March	7.1	14	5.9 mg/l	14.7 mg/l

^{*}Daily max = 7-day average in regulation

Permit limits are as follows (See Attachment 1):

Month	Monthly Avg	7-day Avg
April	2.1 mg/l	5.2 mg/l
May-October	2.1 mg/l	4.5 mg/l
Nov-March	5.9 mg/l	12 mg/l

3. Toxics Pollutants-Priority Pollutant Scan (PPS)

i. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act(CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited...". To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations by Toxic Pollutants" (49 FR 9016-9019,3/9/84). In support of the national policy, Region 6 adopted the "Policy for post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State water quality standard resulting in non-conformance with the provisions of 40 CFR Part 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

ii. Implementation

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The State of Arkansas is currently implementing EPA's Post Third-Round Policy in conformance with the EPA Regional strategy. The 5-year NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, or where there are no applicable technology-based limits, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards from the Regulation No. 2 are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

iii. Priority Pollutant Scan

In accordance with the regional policy ADEQ has reviewed and evaluated the effluent in evaluating the potential toxicity of each analyzed pollutant:

- (a) The results were evaluated and compared to EPA's Minimum Quantification Levels (MQLs) to determine the potential presence of a respective toxic pollutant. Those pollutants which are greater than or equal to the MQLs are determined to be reasonably present in the effluent and an evaluation of their potential toxicity is necessary.
- (b) Those pollutants with one datum shown as "non-detect" (ND), providing the level of detection is equal to or lower than MQL are determined to be not potentially present in the effluent and eliminated from further evaluation.
- (c) Those pollutants with a detectable value even if below the MQL are determined to be reasonably present in the effluent and an evaluation of their potential toxicity is necessary.
- (d) For those pollutants with multiple data values and all values are determined to be non-detect, therefore no further evaluation is necessary. However, where data set includes some detectable concentrations and some values as ND, one-half of the detection level is used for those values below the level of detection to calculate the geometric mean of the data set.

There were no priority pollutants that were detected in the PPS scan submitted with the application, therefore no further evaluation is necessary.

12. Total Residual Chlorine (TRC) Requirements

No measurable which is defined as less than 0.1 mg/l is continued from the previous permit.

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13. Final Limitations

The following effluent limitations requirements were placed in the permit based on the more stringent of the technology-based, water quality-based or previous NPDES permit limitations:

Parameter	Water (~ •	- Technology- Previous NPDES Based/BPJ Permit		Permit Limit			
	Monthly	7-day	Monthly	7-day	Monthly	7-day	Monthly	7-day
	Avg.	Avg.	Avg.	Avg.	Avg.	Avg.	Avg.	Avg.
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CBOD5	10	15	25	40	10	15	10	15
TSS	15	22.5	30	45	15	23	15	22.5
NH3-N								
(April)	2.1	5.2	N/A	N/A	8	12	2.1	5.2
(May-Oct)	2.1	4.5	N/A	N/A	3	5	2.1	4.5
(Nov-March)	5.9	12	N/A	N/A	8	12	5.9	12
Dissolved Oxygen	7.	1	N/	/A	7.	.1	7.	1
, ,	(Monthly A	Avg. Min.)			(Inst.	Min)	(Monthly A	Avg. Min.)
FCB (col/100ml)			N/A	N/A				
(Apr-Sep)	1000	2000			200*	400*	1000	2000
(Oct-Mar)	1000	2000			1000	2000	1000	2000
(April-September)								
(October-March)								
TRC (Inst. Max)	N/	'A	< 0.1	mg/l	< 0.1	mg/l	<0.1	mg/l
рН	6.0-9.	0 s.u.	6.0-9.	.0 s.u.	6-9	s.u.	6.0-9.	0 s.u.

^{*}The FCB limits for April-September in the previous permit were incorrectly applied to a receiving stream designated for primary contact recreation. The correct designation is secondary contact recreation, therefore the limits were corrected to 1000/2000 year round in this permit.

14. Biomonitoring

A. Post Third Round Policy and Strategy

Section 101(a)(3) of the Clean Water Act states that ".....it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited......" To ensure that the CWA's prohibitions for toxics are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region

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6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. In addition, ADEQ is required under 40 CFR Part 122.44(d)(1), adopted by reference in Regulation 6, to include conditions as necessary to achieve water quality standards as established under Section 303 of the Clean Water Act.

The Regional policy and strategy are designed to ensure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State Water Quality Standard (WQS) resulting in non-conformance with the provisions of 40 <u>CFR</u> Part 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

Whole effluent toxicity (WET) testing has been established for assessing and protecting against impacts upon water quality and designated used caused by the aggregate toxic effect of the discharge of pollutants. The stipulated test species, which are appropriate to measure whole effluent toxicity, are consistent with the requirements of the State Water Quality Standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge, in accordance with the regulations promulgated at 40 CFR Part 122.48.

B. <u>Implementation</u>

Arkansas has established a narrative water quality standard under the authority of Section 303 of the CWA which states "toxic materials shall not be present in receiving waters in such quantities as to be toxic to human, animal, plant or aquatic life or to interfere with the normal propagation, growth and survival of aquatic biota."

Whole effluent toxicity testing conducted by the permittee has shown potential ambient toxicity to be the result of the permittee's discharge to receiving stream or water body, at the appropriate instream critical dilution. Pursuant to 40 <u>CFR</u> 122.44(d)(1)(v), ADEQ has determined from the permittee's self reporting that the discharge from this facility does have the reasonable potential to cause, or contribute to an instream excursion above the narrative standard within the applicable State Water Quality Standards, in violation of Section 101(a)(3) of the Clean Water Act. Therefore, the draft permit must establish both monthly average and 7-day minimum effluent limitations for lethality following Regulations promulgated by 40 <u>CFR</u> 122.44(d)(1)(v). These effluent limitations for lethality (7-day NOEC) are applied at outfall 001 on the effective date of the permit. The daily average lethality (7-day NOEC) and 7-day minimum lethality (7-day NOEC) value shall not be less than 100% (Critical Dilution) effluent for outfall 001.

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Biomonitoring of the effluent is thereby required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit are as follows:

TOXICITY TESTS

FREQUENCY

Chronic Biomonitoring

Once/quarter

Since 7Q10 is less than 100 cfs (ft³/sec) and dilution ratio is less than 100:1, chronic biomonitoring requirements will be included in the permit.

The calculations for dilution used for chronic biomonitoring are as follows

Critical dilution (CD) = $(Qd/(Qd + Qb)) \times 100$

Qd = Design flow = 3.1 MGD = 4.8 cfs

7Q10 = 0 Cfs

Qb = Background flow = (0.67) X 7Q10 = 0 cfs

CD = (4.8) / (4.8 + 0) X 100 = 100%

A minimum of five effluent dilutions in addition to an appropriate control (0%) are to be used in the toxicity tests. These additional effluent concentrations are 32%, 42%, 56%, 75%, and 100% (Please see **Attachment I** of CPP). The low-flow effluent concentration (critical dilution) is defined as 100% effluent based on a 0 cfs 7Q10 flow of the receiving stream.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen conductivity, and alkalinity shall be reported according to EPA/600/4-89/001 and shall be submitted as an attachment to the Discharge Monitoring Report (DMR).

C. Administrative Records

The following information summarized toxicity test failures submitted by the permittee during the term of the current permit at outfall 001 (See Attachment 2).:

15. Sample Type and Sampling Frequency

Regulations promulgated at 40 CFR 122.44(i) require permit to establish monitoring requirements which assure compliance with permit limitations.

Requirements for sample type and sampling frequency have been based on the current NPDES permit.

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16. Changes from the previously issued permit

Permittee is responsible for reading the permit in detail carefully and becoming familiar with all the changes even if they are not listed below.

- 1. Parts II, III, and IV have changed.
- 2. pH limits are now expressed as 6.0-9.0 s.u. instead of 6-9 s.u.
- 3. Ammonia limits have changed based on new toxicity standards in Regulation 2.
- 4. Odor condition in Part III has been removed.
- 5. A required wastewater operator class III license is now specified in Part III.
- 6. The 7-day average limit for TSS and NH3-N have been corrected to 1.5 times the monthly average.
- 7. Dissolved oxygen limit is now expressed as a monthly average minimum instead of an instantaneous minimum.
- 8. Fecal Coliform Bacteria limits for the months April September were corrected for the receiving stream designation for secondary contact recreation.
- 9. Part III, Contributing Industries and Pretreatment Requirements have been revised to include additional monitoring to satisfy requirements in 40 CFR 403.5(c)(2).
- 10. Cognizant official has changed.
- 11. Biomonitoring reporting requirements have changed.

17. Storm water pollution prevention plan requirements

The permittee submitted "No exposure certification for exclusion from NPDES Storm water " to the Department during the permit review period, therefore storm water pollution prevention plan requirements are not being included in the permit.

18. SCHEDULE OF COMPLIANCE

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

Compliance is required on the effective date of the permit.

19. 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.

20. SOURCES.

The following sources were used to draft the permit:

- a. NPDES application No. AR0036692 received 07/20/2005.
- b. Arkansas Water Quality Management Plan(WQMP).

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- c. Regulation No. 2.
- d. Regulation No. 6.
- e. 40 CFRs 122, 125, 133 and 403.
- f. NPDES permit file AR0036692.
- g. Discharge Monitoring Reports (DMRs).
- h. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.
- i. Continuing Planning Process (CPP).
- j. Priority Pollutant Scan dated July 6, 2005.
- k. "No Exposure Certification For Exclusion from NPDES Storm Water Permitting" received on January 13, 2006.

21. PUBLIC NOTICE.

The public notice describes the procedures for the formulation of final determinations and shall provide for a public comment period of 30 days. During this period, any interested persons may submit written comments on the permit and may request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall be in writing and shall state the nature of the issue(s) proposed to be raised in the hearing.

A copy of the permit and public notice will be sent to the District Engineer, Corps of Engineers, and to the Regional Director of the U.S. Fish and Wildlife Service on a case-by-case basis, and the EPA and Arkansas Department of Health prior to the publication of that notice.

22. NPDES POINT OF CONTACT.

For additional information, contact:

Shane Byrum
NPDES Branch, Water Division
Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913
Telephone: (501) 682-0622



April 14, 2006

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7002 0860 0007 6830 0696)

Mr. Mike Spencer City of Mena 323 Polk 53 Mena, AR 71953

RE: Application to Discharge to Waters of the State Permit Number AR0036692

Dear Mr. Spencer:

Enclosed is the public notice, Fact Sheet, and a copy of the permit which the Arkansas Department of Environmental Quality has drafted under the authority of the National Pollutant Discharge Elimination System and the Arkansas Water and Air Pollution Control Act. A copy of the final permit will be mailed to you when the Department has made a final permit decision.

In accordance with APCEC Regulation 8, Part 2.1.6, the enclosed public notice will be published by <u>ADEQ</u> in a newspaper of general circulation on or before **April 14, 2006** for one (1) day only. An invoice for the cost of publishing the public notice and proof of publication will be sent to you by the advertising newspaper. The permittee <u>must</u> send proof of publication and payment to the following address as soon as possible but no later than **May 15, 2006**. Until this Department receives proof of publication of the public notice, no further action will be taken on the issuance of your NPDES discharge permit.

Arkansas Department of Environmental Quality NPDES-Water Division P.O. Box 8913 Little Rock, AR 72219-8913 501-682-0620 Fax: 501-682-0910

Comments must be received at ADEQ prior to the close of the public comment period as shown in the enclosed public notice. The public comment period will begin on the date of publication and will end no sooner than 30 days from that date. Once a final permit is issued by the Director and becomes effective, the permittee must comply with all terms and conditions of the permit, or be subject to enforcement actions for any instances of noncompliance during the duration of the permit, usually five (5) years. Consequently, it is imperative that you, as the applicant, thoroughly review the enclosed documentation for accuracy, applicability, and your ability to comply with all conditions therein.

Should you have any questions concerning any part of the permit, contact the NPDES Branch at (501) 682-0622.

Sincerely,

Martin Maner, P.E. Chief, Water Division

MM: sb Enclosure

NPDES DRAFT PERMIT DECISION

THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY PROPOSES TO RENEW A NPDES AUTHORIZATION TO DISCHARGE WASTEWATER TO WATERS OF THE STATE, PERMIT NUMBER AR0036692

This is to give notice that the Arkansas Department of Environmental Quality proposes a draft renewal of the permit application which was received on 07/20/2005 for the following applicant under the National Pollutant Discharge Elimination System and the Arkansas Water and Air Pollution Control Act.

City of Mena 323 Polk 53 Mena, AR 71953

The applicant is requesting a renewal of their existing NPDES discharge permit. The discharge from this existing facility is made into an unnamed tributary of Prairie Creek, thence to Prairie Creek, thence to the Ouachita River in Segment 2F of the Ouachita River Basin. The receiving stream is a Water of the State classified for secondary contact recreation; raw water source for public, industrial, and agricultural water supplies; propagation of desirable species of fish and other aquatic life; and other compatible uses. The facility is located as follows: approximately 1.5 miles southeast of Mena on County Road 53 about a mile east of Arkansas Highway 8; Latitude: 34° 33' 46"; Longitude: 94° 11' 12" in Section 22, Township 2 South, Range 30 West in Polk County, Arkansas. The outfall is located at the following coordinates: Latitude: 34° 33' 46" Longitude: 94° 11' 12". Type of treatment: 2-cell aerated lagoon followed by rapid sand filtration, chlorine disinfection, and post aeration. Sludge generated by the treatment process remains in the lagoons and removed as needed. The facility removed the sludge from the lagoons in 2004. Under the standard industrial classification (SIC) code 4952, the applicant's activities are the operation of a municipal treatment plant.

Changes from the previously issued permit are as follows:

Permittee is responsible for reading this general permit in detail carefully and becoming familiar with all the changes even if they are not listed below.

- 1. Parts II, III, and IV have changed.
- 2. pH limits are now expressed as 6.0-9.0 s.u. instead of 6-9 s.u.
- 3. Ammonia limits have changed based on new toxicity standards in Regulation 2.
- 4. Odor condition in Part III has been removed.
- 5. A required wastewater operator class III license is now specified in Part III.
- 6. The 7-day average limit for TSS and NH3-N have been corrected to 1.5 times the monthly average.
- 7. Dissolved oxygen limit is now expressed as a monthly average minimum instead of an instantaneous minimum.
- 8. Fecal Coliform Bacteria limits for the months April September were corrected for the receiving stream designation for secondary contact recreation.
- 9. Part III, Contributing Industries and Pretreatment Requirements have been revised to include additional monitoring to satisfy requirements in 40 CFR 403.5(c)(2).
- 10. Cognizant official has changed.

11. Biomonitoring reporting requirements have changed.

The permit will become effective on or after June 1, 2006 unless:

Comments are received and/or public hearing is requested prior to May 15, 2006, in which case the permit will be effective on or after July 1, 2006.

The permit application and the administrative record are available for review and copying in the Central Records Section, ADEQ, State Police Headquarters, One State Police Plaza, near Interstate 30 and Geyer Springs, Little Rock, Arkansas.

NPDES comments and public hearing procedures may be found at 40 CFR 124.10 through 124.12 and Regulation No. 8. All persons, including the permittee, who wish to comment on ADEQ's draft decision to renew the permit must submit written comments to ADEQ, along with their name and mailing address. During the comment period, any interested person may request a public hearing by filing a written request which must state the technical issues to be raised. A public hearing will be held if ADEQ finds a significant degree of public interest. If a public hearing is held, ADEQ will issue a public notice of hearing at least 30 days prior to the scheduled hearing.

The ADEQ contact person for submitting written comments, requesting information, or obtaining copies of the application, permit and the Fact Sheet is:

Shane Byrum NPDES Branch, Water Division Arkansas Department of Environmental Quality Post Office Box 8913 Little Rock, Arkansas 72219-8913 (501) 682-0622

For those with Internet access, a copy of the proposed draft permit may be found on the Arkansas Department of Environmental Quality's website at:

http://www.adeq.state.ar.us/water/branch_npdes/pn_permits/pnpermits.asp.

After the public comment period, and public hearing if one is held, ADEQ will issue a final permit decision. ADEQ will notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit. Any interested person who has submitted comments may appeal a final decision by ADEQ in accordance with the Arkansas Pollution Control and Ecology Commission Regulation No. 8 (Administrative Procedures).

Submitting written comments to ADEQ or making oral statements on the record at the public hearing on the proposed permitting decision provides individuals with legal standing to appeal a final Department permitting decision. Comments supporting or opposing the proposed decision will provide legal standing. Only parties with legal standing may appeal a permitting decision.

Attachment 1 Ammonia Calculations

Facility Name	City of Mena			
Permit Number	AR0036692			
Receiving				
Stream	unnamed tributary of Prairie Creek	Ecoregion or River name	Ouachita Mountain	
7Q10, cfs	0			
0.25/0.67				
multiplier	0.67	Regulation No. 2 Chronic T	Toxicity Critieria (Instream	Concentration)
Qb, cfs	0.00		AML, mg/l	DML, mg/l
Qe, MGD	3.1	April	2.1	5.2
Qe, cfs	4.79	May - October	2.1	5.2
Cb, mg/l	0	November - March	5.9	14.7

Allowable Effluent Conc., mg/l

(Qe * Ce) + (Qb* Cb) = (Qe + Qb) * IWC Allowable Effluent Conc. (Ce), mg/I

Qe	Effluent Flow	Ce = (IWC (Qe + Qb) - IWC (Q	- Cb X Qb) / Qe	
		,	,	Daily Max,
Ce	Allowable Effluent Concentration		Monthly Avg.,mg/l	mg/l
Qb	% of Low Flow of Receiving Stream	April	2.10	5.20
Cb	Background Concentration	May - October	2.10	5.20
IWC	Instream Waste Concentration Chronic Toxicity Criteria	November - March	5.90	14.70

Chronic Toxicity Criteria vs. D.O. Model Limits

	Monthly Average	je,				Permit
	mg/l		Permit Limits	Daily Maximu	um,mg/l	Limits
Month	Toxicity limit	D.O. limit		Toxicity limit	D.O. limit	
April	2.10	8	2.10	5.20	12	5.20
May - October	2.10	3	2.10	5.20	4.5	4.50
Nov - March	5.90	8	5.90	14.70	12	12.00

Attachment 2

BIOMONITORING FREQUENCY RECOMMENDATION AND RATIONALE FOR ADDITIONAL REQUIREMENTS

Permit Number: AR0036692
Facility Name: City of Mena

Date of Review: **3-7-06** Name of Reviewer: **Clem**

Previous Critical Dilution: 100% Proposed Critical Dilution: 100%

Number of tests performed during previous 5 years by species:

Pimephales promelas (Fathead minnow): 22

Ceriodaphnia dubia (water flea): 21

Failed test dates during previous 5 years by species:

Pimephales promelas (Fathead minnow):	<u>Lethal</u>	Sub-lethal
· ,	5-03	3-01
	6-03	9-01
	9-03	12-01
	6-04	5-03
		6-03
		9-03
		6-04

Ceriodaphnia dubia (water flea):	<u>Lethal</u>	Sub-lethal
· , , ,		12-00
		3-01
		12-01
		5-03
		9-03
		9-04

Previous TRE activities: None

Frequency recommendation by species:

Pimephales promelas (Fathead minnow): four/year

Ceriodaphnia dubia (water flea): four/year

Additional requirements (including WET Limits) rationale/comments concerning permitting: WET Limits are appropriate

Rationale: Continuous Planning Process, 2000, Appendix D,V.D. ".....If effluent toxicity is persistent, whole effluent toxicity limits and/or a TRE requirement will be applied, as appropriate"

Attachment 3

METALS AND CYANIDE	REQUIRED MQL (µg/L)	EPA APPROVED TEST METHOD
Antimony, Total Recoverable	60	200.7
Arsenic, Total Recoverable	10	206.2
Beryllium, Total Recoverable	5	200.7
Cadmium, Total Recoverable	1	213.2
Chromium Total Recoverable	10	200.7
Chromium (6+) Dissolved	10	218.4
Copper, Total Recoverable	10	220.2
Lead, Total Recoverable	5	239.2
Mercury, Total Recoverable	0.2	245.1
Nickel, Total Recoverable	40	200.7
Selenium, Total Recoverable	5	270.2
Silver, Total Recoverable	2	272.2
Thallium, Total Recoverable	10	279.2
Zinc, Total Recoverable	20	200.7
Phenols, Total Recoverable	5	420.1
Cyanide, Total Recoverable	20	335.2