



ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL: RETURN RECEIPT REQUESTED 91 7199 9991 7030 4906 2793

Honorable Ron Burge
Mayor, City of Cave City
P.O. Box 69
Cave City, AR 72521

JUL 31 2013

RE: Discharge Permit Number AR0022110 – AFIN 68-00015

Dear Mayor Burge:

Enclosed are the public notice, a copy of the draft permit and Statement of Basis which the Arkansas Department of Environmental Quality (ADEQ) has prepared and mailed to you on the above date under the authority of the National Pollutant Discharge Elimination System (NPDES) 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 permitting decision.

In accordance with Reg. 8.207, the enclosed public notice will be or has been published by ADEQ in a newspaper of general circulation of your facility 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 must send proof of publication and proof of payment to the address at the bottom of this letter as soon as possible but no later than 30 days from the above date. Until this Department receives proof of publication of the public notice and payment of all permit fees, no further action will be taken on the issuance of your discharge permit.

The following is a list of the major changes to the previously issued permit:

1. A significant digit has been added to CBOD5, TSS, and Ammonia Nitrogen limitations for reporting accuracy purposes.
2. The minimum required DO level is now expressed as an instantaneous minimum.
3. Condition No. 2 of Part II has been expanded to require monitoring the influent and effluent CBOD5 and TSS at least once per year.

For a list of changes, please see Section 5 of the enclosed Statement of Basis.

Comments must be received at ADEQ prior to the close of the public comment period as described in the enclosed public notice. 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 draft permit, please contact J.D. Borgeson at (501) 682-0045.

Sincerely,

Ryan Benefield, P.E.
Deputy Director

RB:jdb

Enclosure

PUBLIC NOTICE OF DRAFT DISCHARGE PERMIT
PERMIT NUMBER AR0022110, AFIN 68-00015

This is to give notice that the Arkansas Department of Environmental Quality (ADEQ), Water Division, 5301 Northshore Drive, North Little Rock, Arkansas 72118-5317 at telephone number (501) 682-0622, proposes a draft renewal of the permit number AR0022110 for which an application was received on 1/3/2013 for the following applicant under the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act.

Applicant: City of Cave City, Foley Drive, Cave City, AR 72521. Location: from Hwy 167, head east on E. Center/AR Hwy 230 for 0.6 miles, then head south on Foley Dr. for 0.3 miles, facility at end of Foley Drive; Latitude: 35° 56' 13.55"; Longitude: 91° 32' 10.47" in Sharp County, Arkansas. The discharge of treated municipal wastewater is into an Unnamed Tributary, thence to Curia Creek, thence to the Black River, thence to the White River in Segment 4G of the White River Basin.

ADEQ's contact person for submitting written comments, requesting information regarding the draft permit, or obtaining a copy of the permit and the Statement of Basis is J.D. Borgeson, at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us. For those with Internet access, a copy of the proposed draft permit as well as the publication date may be found on the ADEQ's website at: http://www.adeq.state.ar.us/water/branch_permits/individual_permits/pn_permits/pnpermits.asp.

The last day of the comment period is 30 days after the publication date. If the last day of the comment period is a Saturday, Sunday or legal holiday, the public comment period shall expire on the next day that is not a Saturday, Sunday or legal holiday. For information regarding the actual publication date along with the actual date and time the comment period will end, please contact J.D. Borgeson at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us. Public notice, comments, and hearings will be conducted in accordance with Regulation 6.104(A)(5) [40 CFR Parts 124.10 through 124.12 by reference] and Regulation 8.209 and 8.210 (Administrative Procedures). All persons, including the permittee, who wish to comment on ADEQ's draft permitting decision must submit written comments to ADEQ, along with their name and mailing address. A Public Hearing will be held when ADEQ finds a significant degree of public interest. After the public comment period, ADEQ will issue a final permitting decision. ADEQ will notify the applicant and each person who has submitted written comments or request notice of the final permitting decision. Any interested person who has submitted comments may appeal a final decision by ADEQ in accordance with the APCEC Regulation No. 8.603.

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Statement of Basis

This Statement of Basis is for information and justification of the permit limits only. Please note that it is not enforceable. This draft permitting decision is for renewal of the discharge Permit Number AR0022110 with Arkansas Department of Environmental Quality (ADEQ) Facility Identification Number (AFIN) 68-00015 to discharge to Waters of the State.

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT.

The applicant's mailing address is:

City of Cave City
P.O. Box 69
Cave City, AR 72521

The facility address is:

City of Cave City
Foley Drive
Cave City, AR 72521

3. PREPARED BY.

The permit was prepared by:

J.D. Borgeson, E.I.
Staff Engineer
Discharge Permits Section, Water Division
(501) 682-0045
E-mail: borgeson@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date:	07/01/2008
Previous Permit Expiration Date:	6/30/2013

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Permit Number: AR0022110
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The permittee submitted a permit renewal application on 1/3/2013 with additional information received on 2/27/2013. It is proposed that the current discharge permit be reissued for a 5-year term in accordance with regulations promulgated at 40 CFR Part 122.46(a).

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

BAT - best available technology economically achievable
BCT - best conventional pollutant control technology
BMP - best management practice
BOD₅ - five-day biochemical oxygen demand
BPJ - best professional judgment
BPT - best practicable control technology currently available
CBOD₅ - carbonaceous biochemical oxygen demand
CD - critical dilution
CFR - Code of Federal Regulations
cfs - cubic feet per second
COD - chemical oxygen demand
COE - United States Corp of Engineers
CPP - continuing planning process
CWA - Clean Water Act
DMR - discharge monitoring report
DO - dissolved oxygen
ELG - effluent limitation guidelines
EPA - United States Environmental Protection Agency
ESA - Endangered Species Act
FCB - fecal coliform bacteria
gpm - gallons per minute
MGD - million gallons per day
MQL - minimum quantification level
NAICS - North American Industry Classification System
NH₃-N - ammonia nitrogen
NO₃ + NO₂-N - nitrate + nitrite nitrogen
NPDES - National Pollutant Discharge Elimination System
O&G - oil and grease
Reg. 2 - APCEC Regulation No. 2
Reg. 6 - APCEC Regulation No. 6

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Reg. 8 - APCEC Regulation No. 8
Reg. 9 - APCEC Regulation No. 9
RP - reasonable potential
SIC - standard industrial classification
TDS - total dissolved solids
TMDL - total maximum daily load
TP - total phosphorus
TRC - total residual chlorine
TSS - total suspended solids
UAA - use attainability analysis
USF&WS - United States Fish and Wildlife Service
WET - Whole effluent toxicity
WQMP - water quality management plan
WQS - Water Quality standards
WWTP - wastewater treatment plant

DMR Review:

The Discharge Monitoring Reports (DMR's) for the last three years were reviewed during the permit renewal process. There were no violations noted during the review of permit data.

Legal Order Review:

There are currently no active Consent Administrative Orders (CAOs) or Notice of Violations (NOVs) for this facility.

5. SIGNIFICANT CHANGES FROM THE PREVIOUSLY ISSUED PERMIT.

The permittee is responsible for carefully reading the permit in detail and becoming familiar with all of the changes therein:

1. The facility coordinates have been changed to the front gate of the facility.
2. The outfall coordinates have been corrected.
3. The description of the receiving stream has been corrected.
4. Parts II, III, and IV of the permit have been modified.
5. A significant digit has been added to CBOD5 and TSS limitations for reporting accuracy purposes.
6. The minimum required DO level is now expressed as an instantaneous minimum.

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7. Condition No. 2 of Part II has been expanded to require monitoring the influent and effluent CBOD5 and TSS at least once per year.

6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfall is located at the following coordinates based on Google Earth using WGS84:

Latitude: 35° 56' 2.4" Longitude: 91° 31' 59.4"

The receiving waters named:

Unnamed Tributary, thence to Curia Creek, thence to the Black River, thence to the White River in Segment 4G of the White River Basin. The receiving stream with USGS Hydrologic Unit Code (H.U.C) of 11010009 and reach # 901 is a Water of the State classified for secondary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

7. 303(d) LIST, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS.

A. 303(d) List:

The receiving stream is not listed on the 2008 303(d) list. However, the Black River is approximately 30 miles downstream from the facility and is listed in Category 5f on the 2008 303(d) list for Dissolved Oxygen. Since a Dissolved Oxygen limit has already been imposed based on a wasteload evaluation for this facility and there have been no DMR violations for Dissolved Oxygen in the past 3 years, no further action is required at this time.

B. Endangered Species:

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS). The draft permit and Statement of Basis will be sent to the USF&WS for their review.

C. Anti-Degradation:

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Antidegradation Policy and all other applicable water quality standards found in APC&EC Regulation No. 2.

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8. OUTFALL, TREATMENT PROCESS DESCRIPTION, AND FACILITY CONSTRUCTION.

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

- A. Design Flow: 0.45 MGD
- B. Type of Treatment: bar screen followed by oxidation ditch, clarifier, dosing tank, facultative ponds, intermittent sand filter, chlorine disinfection, and post aeration.
- C. Discharge Description: treated municipal wastewater.
- D. Facility Status: This facility is classified as a Minor municipal since the design flow of the facility listed above is less than 1.0 MGD.
- E. Facility Construction: This permit does not authorize or approve the construction or modification of any part of the treatment system or facilities. Approval for such construction must be by permit issued under Reg. 6.202.

9. ACTIVITY.

Under the Standard Industrial Classification (SIC) code of 4952 or North American Industry Classification System (NAICS) code of 221320, the applicant's activities are the operation of a sewage treatment plant.

10. INDUSTRIAL WASTEWATER CONTRIBUTIONS.

NO INDUSTRIAL USERS

Currently, it does not appear the permittee receives process wastewater from any significant industrial users as defined by 40 CFR Part 403.3(v). Standard boilerplate Pretreatment Prohibitions (40 CFR Part 403.5[b]) and reporting requirements are deemed appropriate at this time.

11. SEWAGE SLUDGE PRACTICES.

Sludge is accumulating in the bottom of the treatment ponds. While the previous NPDES permit allowed the facility to land apply their sludge, permittees are now required to obtain a separate land application permit in order to do so. The facility has ceased land application until they obtain this permit at an undisclosed time in the future.

12. PERMIT CONDITIONS.

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

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Effluent Limitations

Outfall 001-Treated treated municipal wastewater

1. Conventional and/or Toxic Pollutants

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Flow	N/A	Report, MGD	Report, MGD (Daily Max.)	continuous	totalizing meter
Overflows	Monthly Total SSOs (occurrences/month)			See Part II Condition No. 5	
Overflow Volume	Monthly Total Volume of SSOs (gallons/month)			See Part II Condition No. 5	
Carbonaceous Biochemical Oxygen Demand (CBOD5)					
(Mar-Oct)	37.5	10.0	15.0	two/month	grab
(Nov-Feb)	75.0	20.0	30.0	two/month	grab
Total Suspended Solids (TSS)					
(Mar-Oct)	56.0	15.0	22.5	two/month	grab
(Nov-Feb)	75.0	20.0	30.0	two/month	grab
Ammonia Nitrogen (NH3-N)					
(March)	18.7	5.0	7.5	two/month	grab
(April)	14.6	3.9	3.9	two/month	grab
(May-Oct)	11.0	3.0	4.5	two/month	grab
(Nov-Feb)	37.5	10.0	15.0	two/month	grab
Dissolved Oxygen (DO)					
(Mar-Apr)	N/A	7.0, (Inst. Min.)		two/month	grab
(May-Oct)	N/A	6.0, (Inst. Min.)		two/month	grab
(Nov-Feb)	N/A	8.0, (Inst. Min.)		two/month	grab
Fecal Coliform Bacteria (FCB)		(colonies/100 ml)			
	N/A	1000	2000	two/month	grab
pH	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	two/month	grab

2. **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).

13. 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 decisions as required under 40 CFR Part 124.7.

Technology-Based Versus Water Quality-Based Effluent Limitations And Conditions

Following regulations promulgated at 40 CFR Part 122.44, 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 as follows:

Parameter	Water Quality-Based		Technology-Based/BPJ		Previous Permit		Permit Limit	
	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l
CBOD5								
(Mar-Oct)	10.0	15.0	25.0	40.0	10	15	10.0	15.0
(Nov-Feb)	20.0	30.0	25.0	40.0	20	30	20.0	30.0
TSS								
(Mar-Oct)	N/A	N/A	15.0	22.5	15	22.5	15.0	22.5
(Nov-Feb)	N/A	N/A	20.0	30.0	20	30	20.0	30.0
NH3-N								
(March)	5.0	7.5	N/A	N/A	5	7.5	5.0	7.5
(April)	3.9	3.9	N/A	N/A	3.9	3.9	3.9	3.9
(May-Oct)	3.0	4.5	N/A	N/A	3	4.5	3.0	4.5
(Nov-Feb)	10.0	15.0	N/A	N/A	10	15	10.0	15.0

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Parameter	Water Quality-Based		Technology-Based/BPJ		Previous Permit		Permit Limit	
	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l
DO								
(Mar-Apr)	6.0, (Inst. Min.)		N/A		6.0 (Monthly Avg. Min.)		6.0 (Inst. Min.)	
(May-Oct)	7.0, (Inst. Min.)		N/A		7.0 (Monthly Avg. Min.)		7.0 (Inst. Min.)	
(Nov-Feb)	8.0, (Inst. Min.)		N/A		8.0 (Monthly Avg. Min.)		8.0 (Inst. Min.)	
FCB (col/100 ml)	1000	2000	N/A	N/A	1000	2000	1000	2000
pH	6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-9.0 s.u.	

A. Justification for Limitations and Conditions of the draft permit:

Parameter	Water Quality or Technology	Justification
CBOD5 ¹	Water Quality	"Wasteload Evaluation for Cave City's Discharge into Curia Creek," ADEQ 1985, 40 CFR 122.44 (I); previous permit
TSS ¹	Technology	40 CFR 122.44 (I) and previous permit
NH3-N ¹	Water Quality	"Wasteload Evaluation for Cave City's Discharge into Curia Creek," ADEQ 1985, Reg. 2.512
DO ²	Water Quality	"Wasteload Evaluation for Cave City's Discharge into Curia Creek," ADEQ 1985, Reg. 2.505
Fecal Coliform Bacteria	Water Quality	Reg. 2.507
pH	Water Quality	Reg. 2.504

¹ A significant digit has been included to these parameters for reporting accuracy purposes.

² The minimum required DO level is now expressed as an instantaneous minimum. Reg. 2.501 states that the specific standards set forth in Chapter 5 of Regulation 2 shall apply to all surface waters at all times except during periods when flows are less than the applicable critical flow. Since the dissolved oxygen water quality standards apply at all times, not on an average basis, the dissolved oxygen standards are considered to be instantaneous standards. Based on the best engineering judgment of the permit writer, no schedule of compliance for DO is needed since extended aeration treatment is used directly prior to discharge and there have been no DO monitoring period violations in the previous three years.

B. Anti-backsliding

The draft permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402(o) [40 CFR 122.44(l)]. The final effluent limitations for reissuance permits must be as stringent as those in the previous permit, unless the less stringent limitations can be justified using exceptions listed in 40 CFR 122.44 (l)(2)(i).

The draft permit maintains the requirements of the previous permit.

C. Limits Calculations

1. Mass limits:

In accordance with 40 CFR 122.45(f)(1), all pollutants limited in permits shall have limitations expressed in terms of mass if feasible. 40 CFR 122.45(f)(2) allows for pollutants which are limited in terms of mass to also be limited in terms of other units of measurement.

The calculation of the loadings (lbs per day) uses a design flow of 0.45 MGD and the following equation:

$$\text{lbs/day} = \text{Concentration (mg/l)} \times \text{Flow (MGD)} \times 8.34$$

2. 7-Day Average Limits:

The 7-Day Average limits for NH₃-N (March, November through February, and May through October) as well as CBOD₅ and TSS are based on Section 5.4.2 of the Technical Support Document for Water Quality-Based Toxics Control.

$$\text{7-Day Average limits} = \text{Monthly average limits} \times 1.5$$

The 7-Day Average NH₃-N limits for the months of April are based on the requirements of Reg. 2.512.

The 7-Day Average limit for FCB is based on Reg. 2.507.

3. Ammonia-Nitrogen (NH₃-N):

The water quality effluent limitations for Ammonia are based either on DO-based effluent limits or on toxicity-based standards, whichever are more stringent. The toxicity-based effluent limitations are based on Reg. 2.512 and the CPP.

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D. 208 Plan (Water Quality Management Plan)

No changes to the 208 Plan are suggested.

14. SAMPLE TYPE AND FREQUENCY.

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR Part 122.48(b)] and to ensure compliance with permit limitations [40 CFR Part 122.44(i)(l)].

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

Parameter	Previous Permit		Draft Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Flow	continuous	totalizing meter	continuous	totalizing meter
CBOD5	two/month	grab	two/month	grab
TSS	two/month	grab	two/month	grab
NH3-N	two/month	grab	two/month	grab
DO	two/month	grab	two/month	grab
FCB	two/month	grab	two/month	grab
pH	two/month	grab	two/month	grab

15. PERMIT COMPLIANCE.

A Schedule of Compliance has not been included in this permit. Compliance with all permit requirements is required on the effective date of the permit.

16. 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.

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17. SOURCES.

The following sources were used to draft the permit:

- A. Application No. AR0022110 received 1/3/2013 with additional information received on 2/27/2013.
- B. Arkansas Water Quality Management Plan (WQMP).
- C. APCEC Regulation No. 2.
- D. APCEC Regulation No. 3.
- E. APCEC Regulation No. 6.
- F. 40 CFR Parts 122, 125, 133 and 403.
- G. Discharge permit file AR0022110.
- H. Discharge Monitoring Reports (DMRs).
- I. "Arkansas Water Quality Inventory Report 2008 (305B)", ADEQ.
- J. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.
- K. Continuing Planning Process (CPP).
- L. Technical Support Document For Water Quality-based Toxic Control.

18. 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 permitting 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 via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Department of Arkansas Heritage, the EPA, and the Arkansas Department of Health.

19. POINT OF CONTACT.

For additional information, contact:

J.D. Borgeson
Permits Branch, Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
Telephone: (501) 682-0045

DRAFT

Permit Number: AR0022110

AFIN: 68-00015

**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 (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.),

City of Cave City

is authorized to discharge treated municipal wastewater from a facility located as follows: from Hwy 167, head east on E. Center/AR Hwy 230 for 0.6 miles, head south on Foley Dr. for 0.3 miles, facility at end of Foley drive in Sharp County, Arkansas. The applicant's mailing address is: 120 Spring St., Cave City, Arkansas, 72521.

Facility Coordinates: Latitude: 35° 56' 13.55"; Longitude: 91° 32' 10.47"

Receiving stream: Unnamed Tributary, thence to Curia Creek, thence to the Black River, thence to the White River in Segment 4G of the White River Basin.

The permitted outfall is located at the following coordinates:

Outfall 001: Latitude: 35° 56' 2.4"; Longitude: 91° 31' 59.4"

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit. Per Part III.D.10, the permittee must re-apply on or before 180 days prior to the expiration date listed below for permit coverage past the expiration date.

Effective Date:

Expiration Date:

Ryan Benefield, P.E.
Deputy Director
Arkansas Department of Environmental Quality

Issue Date

PART I PERMIT REQUIREMENTS

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

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below as well as Parts II and III. See Part IV for all definitions and calculations.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Flow	N/A	Report, MGD	Report, MGD (Daily Maximum)	continuous	totalizing meter
Overflows	Monthly Total SSOs (occurrences/month)			See Comments ¹	
Overflow Volume	Monthly Total Volume of SSOs (gallons/month)			See Comments ¹	
Carbonaceous Biochemical Oxygen Demand (CBOD5)					
(Mar-Oct)	37.5	10.0	15.0	two/month	grab
(Nov-Feb)	75.0	20.0	30.0	two/month	grab
Total Suspended Solids (TSS)					
(Mar-Oct)	56.0	15.0	22.5	two/month	grab
(Nov-Feb)	75.0	20.0	30.0	two/month	grab
Ammonia Nitrogen (NH3-N)					
(March)	18.7	5.0	7.5	two/month	grab
(April)	14.6	3.9	3.9	two/month	grab
(May-Oct)	11.0	3.0	4.5	two/month	grab
(Nov-Feb)	37.5	10.0	15.0	two/month	grab
Dissolved Oxygen (DO)					
(Mar-Apr)	N/A	7.0, (Inst. Min.)		two/month	grab
(May-Oct)	N/A	6.0, (Inst. Min.)		two/month	grab
(Nov-Feb)	NA	8.0, (Inst. Min)		two/month	grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
	N/A	1000	2000	two/month	grab
pH	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	two/month	grab

¹ See Condition No. 5 of Part II (SSO Condition). If there are no overflows during the entire month, report "zero" (0).

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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 as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken after post aeration.

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Permit Number: AR0022110

AFIN: 68-00015

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SECTION B. PERMIT COMPLIANCE

Compliance is required on the effective date of the permit.

PART II OTHER CONDITIONS

1. The operator of this wastewater treatment facility shall be licensed as Class III by the State of Arkansas in accordance with APCEC Regulation No. 3.
2. For publicly owned treatment works, the 30-day average percent removal for Carbonaceous Biochemical Oxygen Demand (CBOD5) and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR Part 133.102, as adopted by reference in APCEC Regulation No. 6. The permittee must monitor the influent and effluent CBOD5 and TSS at least once per year and calculate the percent removal to ensure compliance with the required 85 percent removal. This information must be maintained on site and provided to Department personnel upon request.
3. 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 issuance that would have justified the application of different permit conditions at the time of permit issuance.
4. 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 Permits 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 Part 136 or approved in accordance with 40 CFR Part 136.5; and
- All associated devices are installed, calibrated, and maintained to insure the accuracy of the measurements and are consistent with the 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.

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5. Sanitary Sewer Overflow (SSO) Reporting Requirements:

All SSOs are prohibited.

A. A sanitary sewer overflow is any spill, release or diversion of wastewater from a sanitary sewer collection system including:

1. Any overflow, whether it discharges to the waters of the state or not; or
2. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the state.

B. Immediate Reporting

Overflows that endanger health or the environment shall be orally reported to the Enforcement Branch of the Water Division by telephone (501-682-0638) or by email waterenfsso@adeq.state.ar.us within 24 hours from the time the permittee becomes aware of the circumstance.

C. Follow-Up Written Reports/email:

A written report of overflows that endanger health or the environment shall be provided to ADEQ within 5 days of the time the permittee becomes aware of the circumstance.

At a minimum, the report shall identify:

1. The location(s) of overflow;
2. The receiving water (If there is one);
3. The duration of overflow;
4. Cause of overflow; and
5. The estimated volume of overflow (gal).

A 24-hr and 5-day follow-up written report can be filled-in or downloaded from the ADEQ /Water Division/Enforcement Branch Web page at

http://www.adeq.state.ar.us/water/branch_enforcement/forms/sso_report.asp

D. Reporting for All SSOs on DMR

Sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance shall be reported on your monthly operating reports. For counting occurrences, each location on the sanitary sewer system where there is an overflow, spill, release, or diversion of wastewater on a given day is counted as one occurrence. For example, if on a given day overflows occur from a manhole at one location and from a damaged pipe at another location and they both enter waters of the state, you should record two occurrences for that day. **At the end of the month, total the daily occurrences and volumes from all locations on your system and report this number on the DMR.**

6. Best Management Practices (BMPs), as defined in Part IV.6, must be implemented for the facility along with the collection system to prevent or reduce the pollution of waters of the State from stormwater runoff, spills or leaks, sludge or waste disposal, or drainage from raw sewage. The permittee must amend the BMPs whenever there is a change in the facility or a change in the operation of the facility.
7. 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* or pass through**;
 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 Pass Through** or 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 degrees Centigrade (104 degrees Fahrenheit) 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/or
 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 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.

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.

- * According to 40 CFR Part 403.3(k) the term *Interference* means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
1. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
 2. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued under (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
- ** According to 40 CFR 403.3(p) the term *Pass Through* means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

8. Sludge is accumulating in the bottom of the treatment ponds.

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9. Monitoring Frequency Reduction

After the submittal of 12 months (minimum of 12 data points) of data, the permittee may request, in writing, Department approval of a reduction in monitoring frequency. This request shall contain an explanation as to why the reduced monitoring is appropriate. A reduction will only be allowed if effluent concentrations are below the discharge limitations and there is minimal variability in the effluent concentrations. Upon receipt of written approval by the Department, the permittee may reduce the monitoring frequency. A one time monitoring frequency reduction for every parameter except flow shall not be reduced to less than once per quarter. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittee.