

A R K A N S A S Department of Environmental Quality

JUL 7 2015

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (91 7199 9991 7030 4937 3691)

Honorable Sandra Smith Mayor, City of Keiser P.O. Box 138 Keiser, AR 72351

RE: Discharge Permit Number AR0034754 - AFIN 47-00142

Dear Mayor Smith:

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 <u>ADEQ</u> 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 <u>must</u> 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.

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 Christian Wiberley at (501) 682-0045.

Sincerely,

Ellen Carpenter Chief, Water Division

Cilier, water Division

Elle Carpention

EC:cw

Enclosure

PUBLIC NOTICE OF DRAFT DISCHARGE PERMIT PERMIT NUMBER AR0034754, AFIN 47-00142

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) 682-0623, proposes a draft issuance of the permit number AR0034754 for which an application was received on November 19, 2014, with additional information received on December 22, 2014 and January 28, 2015, for the following applicant under the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act.

Applicant: City of Keiser, 102 S Hwy 181, Keiser, AR 72351. Location: take Highway 181 south of Keiser, turn west along Ditch 47, follow gravel road approximately one mile; Latitude: 35° 40′ 9.45″; Longitude: 90° 5′ 55.75″ in Mississippi County, Arkansas. The discharge of treated municipal wastewater is into Ditch No. 31, thence to the Tyronza River, thence to the St. Francis River in Segment 5A of the St. Francis River Basin.

ADEQ's contact person for submitting written comments on the draft permit, requesting information regarding the draft permit, or obtaining a copy of the permit and the Statement of Basis is Christian Wiberley, 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: https://www.adeq.state.ar.us/water/branch permits/individual permits/pn permits/pnpermits.asp.

The comment period for the draft permit shall end at 4:30 P.M. (Central Time) on the 30th day 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 Christian Wiberley 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 8.207 through 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.

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 issuance of the discharge Permit Number AR0034754 with Arkansas Department of Environmental Quality (ADEQ) Facility Identification Number (AFIN) 47-00142 to discharge to Waters of the State.

John Bailey, P.E.

Water Division

(501) 682-0629

Permits Branch Manager

NPDES Discharge Permits Section

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 Keiser P.O. Box 138 Keiser, AR 72351

The facility address is:

City of Keiser 102 S Hwy 181 Keiser, AR 72351

3. PREPARED BY.

The permit was prepared by:

Christian Wiberley
Staff Engineer
NPDES Discharge Permits Section
Water Division
(501) 682-0045

E-mail: wiberley@adeq.state.ar.us E-mail: bailey@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date: June 1, 2010 Previous Permit Expiration Date: April 30, 2015

Page 2 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

A permit application for renewal was not received until November 19, 2014, after the required date to reapply. That application was deemed incomplete. Information to complete the application was not received until January 28, 2015. The Department deemed the permit application complete on February 3, 2015. Reg. 6.201 and 40 CFR 122.6 only allow for the continuation of expired permits pending issuance of a renewal permit if the permittee has submitted a timely (i.e., 180 days prior to the permit's expiration date) and complete application and the Department, through no fault of the permittee, has not issued a new permit prior to the expiration date of the previous permit. 40 CFR 122.21(d) specifically forbids the Department from extending the submittal date for the renewal application past the date of permit expiration. Therefore, this permit is being issued as new permit under the same permit number.

It is proposed that a new discharge permit be issued 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

Page 3 of Statement of Basis Permit Number: AR0034754 AFIN: 47-00142

NH3-N - ammonia nitrogen

 $NO_3 + NO_2$ -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

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

USGS – United States Geological Survey

WET - Whole effluent toxicity

WQMP - water quality management plan

WQS - Water Quality standards

WWTP - wastewater treatment plant

Compliance and Enforcement History:

Compliance and Enforcement History for this facility can be reviewed by using the following web link:

http://www.adeq.state.ar.us/ftproot/Pub/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0034754_Compliance%20Review%20for%20City%20of%20Keiser_20150211.pdf

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 Monthly Total number of Sanitary Sewer Overflows (SSOs) and the Monthly Total Volume of SSOs must be reported on the Discharge Monitoring Reports. See Condition No. 5(D) of Part II of the permit for more information.
- 2. In order to ensure compliance with the required removal efficiencies based on 40 CFR Part 133.102(a) and 133.105(b), a requirement to monitor the influent for BOD5 and TSS at least once per year has been added to the current Condition No. 2 of Part II of the permit.

Page 4 of Statement of Basis Permit Number: AR0034754 AFIN: 47-00142

- 3. The required 30-day average percent removal efficiency of 65% for Total Suspended Solids (TSS) has been added to the current Condition No. 2 of Part II of the permit in accordance with 40 CFR 133.103(c) and the EPA memo to Region 6 regarding limit requirements for waste stabilization ponds. See Section 12.A of this Statement of Basis for more information.
- 4. In order to verify that the ponds still have adequate treatment capacity, a condition to measure the depth of sludge in the ponds and to calculate the remaining operating capacity has been added to Part IB (1) of the permit: Permit Compliance Schedule. See Condition No. 8 of Part II of the permit and Section 11 of this Statement of Basis for further information.
- 5. A requirement to submit plans and specifications for the installation of a flow-measuring device within 90 days of the effective date of the permit has been added to Part IB (2) of the permit: Permit Compliance Schedule. See Section 13 of this Statement of Basis for further information.

6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfall is located at the following coordinates based on Google Earth using WSG84:

Latitude: 35° 40' 9" Longitude: 90° 8' 47"

The receiving waters named:

Ditch No. 31, thence to the Tyronza River, thence to the St. Francis River in Segment 5A of the St. Francis River Basin. The receiving stream with USGS Hydrologic Unit Code (H.U.C) of 08020203 and reach #012 is a Water of the State classified for primary and 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. It should be noted that the St. Francis River (over 50 miles downstream of the facility) is listed as an Ecologically Sensitive Water Body (ESW).

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. Therefore, no permit action is necessary.

Page 5 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

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.

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

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

A. Design Flow: 0.15 MGD

B. Type of Treatment: three-cell lagoon with chlorine disinfection

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 22132, 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



Page 6 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

Prohibitions (40 CFR Part 403.5[b]) and reporting requirements are deemed appropriate at this time.

11. SEWAGE SLUDGE PRACTICES.

Sludge will accumulate in the bottom of the lagoons. The permittee reported in the application that the lagoons were 40 years old, and sludge has never been removed nor has depth ever been measured. Since the ponds are over 20 years old, it was deemed necessary to determine the level of sludge in order to verify that the system has adequate treatment capacity. A condition has been added to the permit that requires that a sludge survey be performed within 90 days of the effective date of the permit and a report be sent to the Department.

12. DEVELOPMENT AND BASIS FOR PERMIT CONDITIONS.

The Arkansas Department of Environmental Quality has determined 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.). All of the information contained in the application, including all of the submitted effluent testing data, was reviewed to determine the need for effluent limits and other permit requirements.

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:

Page 7 of Statement of Basis Permit Number: AR0034754 AFIN: 47-00142

Parameter	Water Quality-		Technology-		Previous		Permit Limit	
	Based		Based/BPJ		Permit			
	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
BOD5	>30.0*	>45.0	30.0	45.0	30.0	45.0	30.0	45.0
TSS	N/A	N/A	90.0	135.0	90.0	135.0	90.0	135.0
DO	2.0 (Inst. Min.)		N/A		2.0 (Inst. Min.)		2.0 (Inst. Min.)	
FCB (col/100 ml)								
(Apr-Sept)	200	400	N/A	N/A	200	400	200	400
(Oct-Mar)	1000	2000	N/A	N/A	1000	2000	1000	2000
рН	6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-10.0 s.u.		6.0-9.0 s.u.	

^{*}Technology Limit modeled to ensure compliance with Dissolved Oxygen (DO) Water Quality Standards.

A. Justification for Limitations and Conditions of the Draft Permit:

Parameter	Water Quality	Justification	
	or Technology		
BOD5	Technology	40 CFR 133.102(a) verified with MultiSMP Model	
		dated March 3, 2015, 40 CFR 122.44(1), Previous	
		Permit	
TSS ¹	Technology	40 CFR 133.103(c), EPA Memo, 40 CFR 122.44(l),	
		Previous Permit	
DO	Water Quality	Reg. 2.505, MultiSMP Model dated March 3, 2015,	
		CWA 402(o), Previous Permit	
FCB	Water Quality	Reg. 2.507, CWA 402(o), Previous Permit	
pH^2	Technology	40 CFR 133.102(c), 40 CFR 122.44(l)	

1. TSS:

Since this facility meets the requirements to maintain the extended TSS limit of 90/135 mg/l, the percent removal for TSS of 65% has been added to the permit in accordance with 40 CFR Part 133.105(b)(3). For further information, see Condition No. 2 of Part II of the permit.

Page 8 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

2. pH:

The previous permit had an extended pH range of 6.0-10.0 s.u. based on 40 CFR 133.102(c). This extended pH range must be recertified upon each renewal. The Department did not receive a complete recertification during the renewal process. Therefore, the permit limit range for pH of 6.0-9.0 s.u. has been included in the permit based on 40 CFR 133.102(c). The facility reported only one value on their DMR above 9.0 s.u. in the previous three years from the time of application for reissuance. Therefore, the facility should be able to meet the more stringent limit range of 6.0-9.0 s.u. on a consistent basis with proper operation and maintenance of the treatment system. The permittee may recertify in accordance with the procedures of 40 CFR 133.102(c) during the comment period of the draft permit or during the next renewal cycle in order to be considered for the extended pH range limitation in their permit.

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 CWA 402(o)(2), CWA 303(d)(4), or 40 CFR 122.44 (l)(2)(i).

The draft permit meets or exceeds 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 0.15 MGD and the following equation:

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

2. 7-Day Average Limits:

The 7-Day Average limit for TSS is based on Section 5.4.2 of the Technical Support Document for Water Quality-Based Toxics Control.

Page 9 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

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

The 7-Day Average limit for BOD5 is based on 40 CFR 133.102.

The 7-Day Average limits for FCB are based on Reg. 2.507.

D. 208 Plan (Water Quality Management Plan)

The 208 Plan, developed by the ADEQ under provisions of Section 208 of the federal Clean Water Act, is a comprehensive program to work toward achieving federal water goals in Arkansas. The initial 208 Plan, adopted in 1979, provides for annual updates, but can be revised more often if necessary. No changes to the 208 Plan are being made with this issuance.

E. Applicable Total Maximum Daily Load (TMDL) Reports

The Tyronza River is included in "TMDL for Turbidity for Tyronza River, AR" dated 1/6/2005. It reads, "TSS in this TMDL was considered to represent inorganic suspended solids (i.e., soil and sediment particles from erosion or sediment resuspension). The suspended solids discharged by point sources in the study are assumed to consist primarily of organic solids rather than inorganic solids. Discharges of organic suspended solids from point sources are already addressed by ADEQ though their permitting of point sources to maintain water quality standards for dissolved oxygen." Therefore, since the permit already has both a Water Quality-based limit for DO and a Technology-based limit for TSS, no additional permit action is necessary.

F. Total Residual Chlorine (TRC)

The facility uses chlorine disinfection as part of their treatment system. Chlorine is one of the most widely used and effective technologies for disinfection of wastewater, but it can also be toxic to aquatic life in sufficient concentrations. EPA considers concentrations at the edge of the mixing zone higher than 0.011 mg/l (Chronic Criteria) and 0.019 (Acute Criteria) to be toxic to aquatic organisms. The current detection level for TRC using an EPA approved test method is 0.033 mg/l. The receiving water for this facility has a critical low flow of 10 cfs, so the criteria must be met at the edge of the mixing zone in order to be protective of water quality.

An analysis to determine reasonable potential for TRC toxicity in the effluent was performed using the TRC data that was reported by the permittee on the permit application. The procedures from Appendix D of the CPP were followed. Three data points, taken between January 6, 2015 and January 20, 2015, were provided by the permittee with the application, and the geometric mean was found to be 0.038 mg/l. The following equations were used and the subsequent table summarizes the results:

Page 10 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

$$IWC = CD \times C_e$$
 $CD = \frac{Q_e}{Q_e + Q_b}$ $Q_b = 7Q10 \times MZ \times ZID(acute)$

Where:

IWC= Instream Waste Concentration

CD= Critical dilution

C_e= Pollutant concentration in effluent

Q_e= Design flow of facility

 Q_b = % of critical flow of receiving stream (7Q10 is used as the critical flow)

7Q10= Lowest 7-day average flow of the receiving stream with a 10-year recurrence interval¹

MZ= Mixing zone factor²

ZID= Zone of initial dilution factor (only used for acute)²

² Defined in Appendix D of the 2000 CPP

Тошч	Result				
Term	Acute	Chronic			
C _e (mg/l)	0.038				
Q _e (cfs)	0.232				
7Q10 (cfs)	10				
MZ	0.67				
ZID	0.1	N/A			
Q _b (cfs)	0.670	6.700			
CD	0.257	0.033			
IWC (mg/l)	0.010 0.001				
Criteria (mg/l)	0.019	0.011			
Reasonable Potential?	No No				

As seen in the table, the discharge does not have reasonable potential to violate Water Quality Standards for TRC. Therefore, TRC monitoring has not been included in the permit.

¹ USGS Station No. 07047550, "Identification and Classification of Perennial Streams of Arkansas"

Page 11 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

13. 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	Previou	us Permit	Draft Permit		
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type	
Flow ¹	five/week	instantaneous	five/week	instantaneous	
BOD5	two/month	grab	two/month	grab	
TSS	two/month	grab	two/month	grab	
DO	two/month	grab	two/month	grab	
FCB	two/month	grab	two/month	grab	
рН	two/month	grab	two/month	grab	

1. At the time of application for reissuance, it was discovered that the facility had not been calculating their flow correctly. The same value for flow was being reported every month on the DMR, and it was found that the facility did not have an adequate method or device for measuring their discharge flow. Therefore, a requirement to submit plans and specifications for the installation of a flow-measuring device has been added to the permit in order for the facility to come into compliance with monitoring and reporting requirements.

14. PERMIT COMPLIANCE SCHEDULE.

A Schedule of Compliance has been included requiring the permittee to measure sludge in the ponds, calculate the remaining operating capacity, and report the results to the Department within 90 days of the effective date of the permit. In addition, a Schedule of Compliance has been included requiring the permittee to submit plans and specifications within 90 days of the effective date of the permit for the installation of a flow-measuring device to the outfall.

Compliance with all other permit requirements is required on the effective date of the permit.

Page 12 of Statement of Basis Permit Number: AR0034754

AFIN: 47-00142

15. 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.

16. SOURCES.

The following sources were used to draft the permit:

- A. Application No. AR0034754 received November 19, 2014, with additional information received on December 22, 2014 and January 28, 2015.
- B. Arkansas Water Quality Management Plan (WQMP).
- C. APCEC Regulation No. 2.
- D. APCEC Regulation No. 3.
- E. APCEC Regulation No. 6 which incorporates by reference certain federal regulations included in Title 40 of the Code of Federal Regulations at Reg. 6.104.
- F. 40 CFR Parts 122, 125, 133 and 403.
- G. Discharge permit file AR0034754.
- H. Discharge Monitoring Reports (DMRs).
- I. "2008 Integrated Water Quality Monitoring and Assessment Report", ADEQ.
- J. "2008 List of Impaired Waterbodies (303(d) List)", ADEQ, February 2008.
- K. "TMDL for Turbidity for Tyronza River, AR" dated January 6, 2005.
- L. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.
- M. Continuing Planning Process (CPP).
- N. Technical Support Document For Water Quality-based Toxic Control.
- O. Compliance Review Memo dated February 10, 2015 from Leslie Allen-Daniel.
- P. MultiSMP Model dated March 3, 2015 segmented with City of Dyess.
- Q. EPA Memo to Region 6: Guidance on Implementing Equivalent to Secondary Regulations.

17. 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.

Page 13 of Statement of Basis Permit Number: AR0034754 AFIN: 47-00142

18. POINT OF CONTACT.

For additional information, contact:

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



Permit Number: AR0034754

AFIN: 47-00142

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 Keiser

is authorized to discharge treated municipal wastewater from a facility located as follows: take Highway 181 south of Keiser, turn west along Ditch 47, follow gravel road approximately one mile in Mississippi County, Arkansas. The applicant's mailing address is: 102 S Hwy 181, Keiser, AR, 72351.

Facility Coordinates: Latitude: 35° 40' 9.45"; Longitude: 90° 5' 55.75"

Receiving stream: Ditch No. 31, thence to the Tyronza River, thence to the St. Francis River in Segment 5A of the St. Francis River Basin.

The permitted outfall is located at the following coordinates:

Outfall 001: Latitude: 35° 40' 9"; Longitude: 90° 8' 47"

Arkansas Department of Environmental Quality

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 180 days prior to the expiration date below for permit coverage to continue beyond the expiration date.

Effective Date: Expiration Date:		
r		
Ellen Carpenter		
	Issue Date	
Chief, Water Division		



Permit Number: AR0034754

AFIN: 47-00142 Page 1 of Part IA

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.

Effluent Characteristics	<u>Discharge Limitations</u>		Monitoring Requirements		
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	7-Day Avg.		
Flow	N/A	Report, MGD	Report, MGD (Daily Maximum)	five/week	instantaneous
Overflows	Monthly Total SSOs (occurrences/month)			See Comments ¹	
Overflow Volume	Monthly Total Volume of SSOs (gallons/month)			See Comments ¹	
Biochemical Oxygen Demand (BOD5)	37.5	30.0	45.0	two/month	grab
Total Suspended Solids (TSS)	112.6	90.0	135.0	two/month	grab
Dissolved Oxygen (DO)	N/A	N/A 2.0 (Inst. Min.)		two/month	grab
Fecal Coliform Bacteria (FCB)	(colonies/100ml)				
(Apr-Sept)	N/A	200	400	two/month	grab
(Oct-Mar)	N/A	1000	2000	two/month	grab
рН	N/A	Minimum 6.0 s.u.	Maximum 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).

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 final chlorination, prior to the receiving stream.

Permit Number: AR0034754

AFIN: 47-00142 Page 1 of Part IB

SECTION B. PERMIT COMPLIANCE SCHEDULE

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

- 1. Within 90 days of the effective date of the permit, the permittee shall measure the sludge depths in the ponds and calculate the remaining operating capacities in accordance with Condition 8 of Part II of the permit. This information must be submitted to the Department for review. If, after review, the Department determines that solids removal is needed, it must be performed in accordance with Condition 6 of Part III Section B of the permit.
- 2. Within 90 days of the effective date of the permit, the permittee shall submit plans and specifications for the installation of a flow-measuring device on Outfall 001 to comply with Condition 4 of Part II of the permit. These plans and specifications must be stamped by a Registered Professional Engineer in the State of Arkansas. The Department will determine if additional permitting requirements are necessary or if the change is a minor modification in accordance with Reg. 6.202(C).

All reports required by this compliance schedule shall be submitted to the Department within the time-period specified in Part III.D.5 of the permit (no later than 14 days following each compliance schedule due date listed). Reports must be submitted to the following address:

Arkansas Department of Environmental Quality Enforcement Branch, Water Division 5301 Northshore Drive North Little Rock, AR. 72118-5317



Permit Number: AR0034754

AFIN: 47-00142 Page 1 of Part II

PART II OTHER CONDITIONS

- 1. The operator of this wastewater treatment facility shall be licensed as Class I 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 Biochemical Oxygen Demand (BOD5) shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR Part 133.102(a). The 30-day average percent removal for Total Suspended Solids (TSS) shall not be less than 65 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR Part 133.103(c) and 40 CFR Part 133.105(b). The permittee must monitor the influent BOD5 and TSS at least once per year during a standard sampling event as required in Part IA above. This influent and effluent information must be used to calculate the percent removal to ensure compliance with the required removal efficiency. 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.
- 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.

Permit Number: AR0034754

AFIN: 47-00142 Page 2 of Part II

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.

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.
 - 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 <u>endanger health or the environment</u> shall be orally reported to the Enforcement Branch of the Water Division by telephone (501-682-0638) or by email <u>waterenfsso@adeq.state.ar.us</u> 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.
- 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

Permit Number: AR0034754

AFIN: 47-00142 Page 3 of Part II

D. Reporting for All SSOs on DMR

At the end of the month, total the daily <u>occurrences</u> and <u>volumes</u> from all locations on your system and report this number on the 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.

- 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.

Permit Number: AR0034754 AFIN: 47-00142

Page 4 of Part II

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.
- 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.
 - 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.

Permit Number: AR0034754

AFIN: 47-00142 Page 5 of Part II

** 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 stored in the lagoons. Within 90 days of the effective date of the permit, the permittee shall measure sludge depth in the lagoons and calculate the remaining operating capacity based on the sludge depth and total operational depth (total operational depth does not include the minimum two (2) feet of required freeboard). This information must be submitted to the Department for review as discussed in Part IB (1) of the permit: Permit Compliance Schedule.



Permit Number: AR0034754

AFIN: 47-00142 Page 1 of Part III

PART III STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

1. **Duty to Comply**

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; and/or for denial of a permit renewal application. Any values reported in the required Discharge Monitoring Report (DMR) 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 twenty-five thousand dollars (\$25,000) 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 cause including, but not limited to the following:

- A. Violation of any terms or conditions of this permit.
- B. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 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 Part III.A.11 herein.

Permit Number: AR0034754

AFIN: 47-00142 Page 2 of Part III

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. Toxic Pollutants

Notwithstanding Part III.A.3, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under APCEC Regulation No. 2, as amended, 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, or prohibitions established under APCEC Regulation No. 2, 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. Civil and Criminal Liability

Except as provided in permit conditions for "Bypass of Treatment Facilities" (Part III.B.4), and "Upset" (Part III.B.5), 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 (Ark. Code Ann. § 8-4-101 et seq.).

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 to 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.

Permit Number: AR0034754

AFIN: 47-00142 Page 3 of Part III

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. Applicable Federal, State or Local Requirements

Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal such as endangered species, state or local statute, ordinance or regulation.

11. Permit Fees

The permittee shall comply with all applicable permit fee requirements (i.e., including annual permit fees following the initial permit fee that will be invoiced every year the permit is active) 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 Parts 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.

Permit Number: AR0034754

AFIN: 47-00142 Page 4 of Part III

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 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 Parts III.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 III.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;

Permit Number: AR0034754

AFIN: 47-00142 Page 5 of Part III

(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.

- (c) The permittee submitted notices as required by Part III.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 III.B.4.c(1).

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 III.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 III.D.6.
 - 4. The permittee complied with any remedial measures required by Part III.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

A. 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 waters of the State. The Permittee must comply with all applicable state and Federal regulations governing the disposal of sludge, including but not limited to 40 CFR Part 503, 40 CFR Part 257, and 40 CFR Part 258.

Permit Number: AR0034754

AFIN: 47-00142 Page 6 of Part III

B. Any changes to the permittee's disposal practices described in Part II of the permit will require at least 180 days prior notice to the Director to allow time for additional permitting. Please note that the 180 day notification requirement may be waived if additional permitting is not required for the change.

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 discharge shall be monitored.

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.

Calculated Flow Measurement

For calculated flow measurements that are performed in accordance with either the permit requirements or a Department approved method (i.e., as allowed under Part II.3), the +/- 10% accuracy requirement described above is waived. This waiver is only applicable when the method used for calculation of the flow has been reviewed and approved by the Department.

Permit Number: AR0034754

AFIN: 47-00142 Page 7 of Part III

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 provided by the Department or other form/method approved in writing by the Department (e.g., electronic submittal of DMR once approved). Monitoring results obtained during the previous monitoring period shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month or submitted electronically by 6:00 p.m. of the 25th, following the completed reporting period beginning on the effective date of the permit. When mailing the DMRs, duplicate copies of the forms signed and certified as required by Part III.D.11 and all other reports required by Part III.D, shall be submitted to the Director at the following address:

Enforcement Branch Water Division Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118-5317

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.

Permit Number: AR0034754

AFIN: 47-00142 Page 8 of Part III

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 Part 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.
- 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:

- 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.
- 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.

Permit Number: AR0034754

AFIN: 47-00142 Page 9 of Part III

SECTION D – REPORTING REQUIREMENTS

1. Planned Changes

The Permittee shall give notice to the Director as soon as possible but no later than 180 days prior to any planned physical alterations or additions to the permitted facility [40 CFR 122.41(1)]. Notice is required only when:

- A. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29(b).
- B. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject to effluent limitations in the permit, or to the notification requirements under 40 CFR 122.42(b).

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.

3. Transfers

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 III.C.5. Discharge Monitoring Reports must be submitted even when no discharge occurs during the reporting period.

5. Compliance Schedule

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.

Permit Number: AR0034754 AFIN: 47-00142 Page 10 of Part III

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.
 - 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 Enforcement Section of the Water Division of the ADEQ.
- 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 Enforcement Section of the Water Division of the ADEQ.

7. Other Noncompliance

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

Permit Number: AR0034754

AFIN: 47-00142 Page 11 of Part III

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:

- 1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) 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.
 - (b) 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

Permit Number: AR0034754

AFIN: 47-00142 Page 12 of Part III

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.
- 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:
 - (a) The chief executive officer of the agency.
 - (b) 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).
 - 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 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 APCEC Regulation No. 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

Permit Number: AR0034754

AFIN: 47-00142 Page 13 of Part III

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 III.A.2 and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

Permit Number: AR0034754 AFIN: 47-00142

Page 1 of Part IV

PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act and 40 CFR 122.2 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. "APCEC" means the Arkansas Pollution Control and Ecology Commission.
- 4. "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.
- 5. "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 (APCEC) Regulation No. 2, as amended.
- 6. "Best Management Practices (BMPs)" are activities, practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the State. BMPs also include treatment technologies, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw sewage. BMPs may include structural devices or nonstructural practices.
- 7. **"Bypass"** As defined at 122.41(m).
- 8. "Composite sample" is a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) during operational hours, within the 24-hour period, and combined proportional to flow or a sample collected at more frequent intervals proportional to flow over the 24-hour period.
- 9. "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.
 - A. **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.
 - B. Concentration Calculations: For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 10. "Daily Maximum" discharge limitation means the highest allowable "daily discharge" during the calendar month. The 7-day average for Fecal Coliform Bacteria (FCB) or E-Coli is the geometric mean of the values of all effluent samples collected during the calendar week in colonies per 100 ml.

Permit Number: AR0034754 AFIN: 47-00142

Page 2 of Part IV

- 11. "Department" means the Arkansas Department of Environmental Quality (ADEQ).
- 12. "Director" means the Director of the Arkansas Department of Environmental Quality.
- 13. "Dissolved oxygen limit" shall be defined as follows:
 - A. When limited in the permit as a minimum monthly average, 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.
- 14. "E-Coli" a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For E-Coli, report the monthly average as a 30-day geometric mean in colonies per 100 ml.
- 15. "Fecal Coliform Bacteria (FCB)" 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.
- 16. "Grab sample" means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
- 17. "Industrial User" means a nondomestic discharger, as identified in 40 CFR Part 403, introducing pollutants to a POTW.
- 18. "Instantaneous flow measurement" means the flow measured during the minimum time required for the flow-measuring device or method to produce a result in that instance. To the extent practical, instantaneous flow measurements coincide with the collection of any grab samples required for the same sampling period so that together the samples and flow are representative of the discharge during that sampling period.
- 19. "Instantaneous Maximum" when limited in the permit as an instantaneous maximum value, shall mean that no value measured during the reporting period may fall above the stated value.
- 20. "Instantaneous Minimum" an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
- 21. "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) or E-Coli, report the monthly average.

22. "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 (DMR) 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 DMR shall be submitted by the 25th of the month following the monitoring period end date.

A. MONTHLY:

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

Permit Number: AR0034754

AFIN: 47-00142 Page 3 of Part IV

B. BI-MONTHLY:

is defined as two (2) calendar months or any portion of 2 calendar months for monitoring requirement frequency of once/2 months or more frequently.

C. QUARTERLY:

- 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.

D. 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.

E. 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.

- 23. "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.
- 24. "POTW" means a Publicly Owned Treatment Works.
- 25. "Reduction of CBOD5/BOD5 and TSS in mg/l Formula" ((Influent Effluent) / Influent) X 100
- 26. "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.
- 27. "Sewage sludge" means the solids, residues, and precipitate separated from or created in sewage by the unit processes at a POTW. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff that are discharged to or otherwise enter a POTW.
- 28. **"7-day average"** Also known as "average weekly" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Permit Number: AR0034754

AFIN: 47-00142 Page 4 of Part IV

29. "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.

30. Units of Measure:

"MGD" shall mean million gallons per day.

"mg/l" shall mean milligrams per liter or parts per million (ppm).

"µg/l" shall mean micrograms per liter or parts per billion (ppb).

"cfs" shall mean cubic feet per second.

"ppm" shall mean parts per million.

"s.u." shall mean standard units.

- 31. "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 of preventive maintenance, or careless of improper operations.
- 32. "Visible sheen" means the presence of a film or sheen upon or a discoloration of the surface of the discharge. A sheen can also be from a thin glistening layer of oil on the surface of the discharge.
- 33. "Weekday" means Monday Friday.