#### 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 Flippin Flippin Wastewater Treatment Facility

is authorized to discharge treated municipal wastewater from a facility located as follows: 222 East Industrial Drive, Flippin, AR, 72634 in Marion County.

Facility Coordinates:	Latitude: 36° 16' 56" N;	Longitude: 92° 35' 03" W
Receiving stream:	Fallen Ash Creek, thence to River Basin.	the White River in Segment 4I of the White

The permitted outfall is located at the following coordinates:

Outfall 001: Latitude: 36° 16' 59.59" N; Longitude: 92° 35' 08.76" W

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:November 1, 2022Expiration Date:October 31, 2027

Alan J. York

09/13/2022

Issue Date

Associate Director, Office of Water Quality Arkansas Department of Energy and Environment Division of Environmental Quality

#### PART I PERMIT REQUIREMENTS

# SECTION A.1. 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.

#### <u>Tier I: Limits Effective Prior to Completion of Construction Activities Authorized by State Construction Permit AR0021717C</u> <u>Design Flow: 0.175 MGD\*</u>

	D	ischarge Limitatio	Monitoring Requirements			
Effluent Characteristics	Mass (lbs/day, else specified)	Concentration (mg/l, else specified)		Frequency	Sample Type	
	Monthly Avg.	Monthly Avg. 7-Day Avg.				
Flow	N/A	Report, MGD	Report, MGD (Daily Max.)	five/week	instantaneous	
Overflows	Monthly To	otal SSOs (occurrent	nces/month)	see comments <sup>1</sup>		
Overflow Volume	Monthly Total Volume of SSOs (gallons/month)			see comments <sup>1</sup>		
Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	14.6	10	15	once/month	grab	
Total Suspended Solids (TSS)	21.9	15.0 22.5		once/month	grab	
Ammonia Nitrogen (NH <sub>3</sub> -N)						
(April)	5.8	4.0 4.0		once/month	grab	
(May – October)	2.9	2.0 3.0		once/month	grab	
(November – March)	13.1	9.0	10.5	once/month	grab	
Dissolved Oxygen (DO)	N/A	6.0 (Inst. Min.)		once/month	grab	
Fecal Coliform Bacteria (FCB)		(colonies/100ml)				
(May – September)	N/A	200 400		once/month	grab	
(October – April)	N/A	1000 2000		once/month	grab	
pН	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month	grab	

#### \* See Part II.8 of the permit.

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

Oil, grease, or petrochemical substances shall not be present in receiving waters to the extent that they produce globules or other residue or any visible, colored film on the surface or coat the banks and/or bottoms of the waterbody or adversely affect any of the associated biota. 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 treatment, prior to the receiving stream.

SECTION A.2. 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.

#### <u>Tier II: Limits Effective After Completion of Construction Activities Authorized by State Construction Permit AR0021717C</u> <u>Design Flow: 0.35 MGD\*</u>

	Discharge Limitations			Monitoring Requirements		
Effluent Characteristics	Mass (lbs/day, else specified)	Concentration (mg/l, else specified)		Frequency	Sample Type	
	Monthly Avg.	Monthly Avg. 7-Day Avg.				
Flow	N/A	Report, MGD	Report, MGD (Daily Max.)	five/week	instantaneous	
Overflows	Monthly To	otal SSOs (occurrent	nces/month)	see comments <sup>1</sup>		
Overflow Volume	Monthly Total	Monthly Total Volume of SSOs (gallons/month)			see comments <sup>1</sup>	
Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	29.2	10	15	once/month	grab	
Total Suspended Solids (TSS)	43.8	15.0	22.5	once/month	grab	
Ammonia Nitrogen (NH <sub>3</sub> -N)						
(April)	11.4	3.9 3.9		once/month	grab	
(May – October)	5.8	2.0	3.0	once/month	grab	
(November – March)	26.3	9.0	10.4	once/month	grab	
Dissolved Oxygen (DO)	N/A	6.0 (Inst. Min.)		once/month	grab	
Fecal Coliform Bacteria (FCB)		(colonies/100ml)				
(May – September)	N/A	200 400		once/month	grab	
(October – April)	N/A	1000 2000		once/month	grab	
pH	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month	grab	

#### \* See Part II.8 of the permit.

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

Oil, grease, or petrochemical substances shall not be present in receiving waters to the extent that they produce globules or other residue or any visible, colored film on the surface or coat the banks and/or bottoms of the waterbody or adversely affect any of the associated biota. 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 treatment, prior to the receiving stream.

#### SECTION B. PERMIT COMPLIANCE SCHEDULE

#### **Effluent Temperature Data**

The permittee must submit the results of three (3) effluent temperature tests conducted within the summer months (June, July, and August) and three (3) effluent temperature tests conducted within the winter months (December, January, and February) to satisfy the completion of EPA Form 2A, Table A. This information must be submitted to DEQ within one (1) year of the effective date of the permit to the following email addresses:

water-permit-application@adeq.state.ar.us and water-enforcement-report@adeq.state.ar.us.

## PART II OTHER CONDITIONS

- 1. The operator of this wastewater treatment facility shall be licensed as at least Class III by the State of Arkansas in accordance with APC&EC Rule 3.
- 2. For publicly owned treatment works, the 30-day average percent removal for Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) and Total Suspended Solids (TSS) shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 C.F.R. § 133.102.
- 3. In accordance with 40 C.F.R. §§ 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.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 Branch of the Office of Water Quality of the DEQ for use of the alternate method or instrument.
- The method and/or instrument is in compliance with 40 C.F.R. Part 136 or approved in accordance with 40 C.F.R. § 136.5.
- All associated devices are installed, calibrated, and maintained to ensure 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 Assurance/Quality Control (QA/QC) 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. DEQ must be notified in writing and the permittee must receive written approval from DEQ if the permittee decides to return to the original permit monitoring requirements.

- 5. Sanitary Sewer Overflow (SSO) Reporting Requirements:
  - 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. 24-Hour Reporting:

When an SSO is detected – no matter how small – it must be reported within 24 hours of its discovery to DEQ's Water Quality Enforcement by using the online form in paragraph C below (the preferred method), by phone at (501) 682-0638, or by email at <u>ssoadeq@adeq.state.ar.us</u>.

This initial 24-hour report should include the following information:

- 1. Permit Number
- 2. Location of overflow (manhole number or street address)
- 3. The receiving water (if applicable)
- 4. Cause of overflow (if known)
- 5. Estimated volume of overflow so far
- 6. Total duration of the overflow
- C. 5-Day Follow-Up Written Web Reporting:

A written report of overflows shall be provided to DEQ within 5 days of the 24-hour oral report. A follow-up written report (5-day report) can be filled-in and submitted on the DEQ Office of Water Quality/Enforcement Branch Web page at:

https://www.adeq.state.ar.us/water/enforcement/sso/submit.aspx?type=s

D. 24-Hour and 5-Day Reporting:

If the 24-hour report submitted includes all of the information requested in the 5-day report described in Paragraph C above, then a follow-up 5-day report is not required.

E. 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. 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 then you should record two occurrences for that day.

6. Best Management Practices (BMPs), as defined in Part IV.7, 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, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (°F) or 60 degrees Centigrade (°C) using the test methods specified in 40 C.F.R. § 261.21;
    - 2. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0 s.u., unless the works is 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 (BOD, etc.), 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 °C (104 °F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
    - 6. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
    - 7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
    - 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 Clean Water Act (CWA), including any requirements established under 40 C.F.R. Part 403.
  - C. The permittee shall provide adequate notice to the Division 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 CWA 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 C.F.R. § 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 thereunder (or more stringent State or local regulations): Section 405 of the CWA, 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 C.F.R. § 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. Transition Period

The permittee is modifying the existing wastewater treatment facility. The modifications include replacement of the existing bar screens with a new screening and grit removal system, addition of an oxidation ditch adjacent to the existing ditch, replacement of the existing final clarifiers with two (2) new clarifiers, and addition of a new sludge holding pond. The design flow at Outfall 001 will be increasing from 0.175 MGD to 0.35 MGD when the modified system is constructed and operating.

- A. Beginning on the effective date of the permit, the permittee must submit a Discharge Monitoring Report (DMR) for each permitted design flow (i.e. Tier I = 0.175 MGD and Tier II = 0.35 MGD) on a monthly basis. The DMR for Tier II can be marked and submitted as NODI=9 (Conditional Monitoring Not Required This Period) until such time as the new treatment system is operational. The permittee must continue to submit two (2) monthly DMRs until the notification required in the following Item B of this condition is received.
- B. The permittee must notify DEQ within 30 days of when the treatment facility has been modified and is in operation. The permittee shall follow Tier II requirements after notification until the end of the permit term.

C. The notification for this condition shall either be mailed to:

Permits Branch Office of Water Quality Division of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118-5317

or submitted electronically via email to: water-permit-application@adeq.state.ar.us

#### 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 APC&EC Rule 9 (Permit fees) as required by Part III.A.11 herein.

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 APC&EC Rule 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 APC&EC Rule 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.

## 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. <u>Severability</u>

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 requirements 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 APC&EC Rule 9 (Rule 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 C.F.R. §§ 122.64 and 124.5(d), as adopted in APC&EC Rule 6 and the provisions of APC&EC Rule 8.

## SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

#### 1. Proper Operation and Maintenance

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

#### 2. <u>Need to Halt or Reduce not a Defense</u>

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**

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility, as defined at 40 C.F.R. 122.41(m)(1)(i).

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;
    - (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 periods of equipment downtime or preventive maintenance; and
    - (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. Upset Conditions

- 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. <u>Removed Substances</u>

- 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 C.F.R. Parts 257, 258, and 503.
- B. Any changes to the permittee's disposal practices described in the Statement of Basis, as derived from the permit application, 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. <u>Representative Sampling</u>

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 ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure 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 Division approved method (i.e., as allowed in the *Other Specified Monitoring Requirements* condition under Part II), 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 Division.

## 3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 C.F.R. 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 ensure accuracy of measurements and shall ensure 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 ensure 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. <u>Penalties for Tampering</u>

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. <u>Reporting of Monitoring Results</u>

40 C.F.R. § 127.11(a)(1) and 40 C.F.R. § 127.16(a) require that monitoring reports must be reported on a Discharge Monitoring Reports (DMR) and filed electronically. Signatory Authorities must initially request access for a NetDMR account. Once a NetDMR account is established, access to electronic filing should use the following link <u>https://cdx.epa.gov</u>. Permittees who are unable to file electronically may request a waiver from the Director in accordance with 40 C.F.R. § 127.15. Monitoring results obtained during the previous monitoring period shall be summarized and reported on a DMR dated and submitted no later than the 25<sup>th</sup> day of the month, following the completed reporting period beginning on the effective date of the permit.

## 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 C.F.R. 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. <u>Retention of Records</u>

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. <u>Record Contents</u>

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 individual(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.

## **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 C.F.R. § 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 C.F.R. § 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 which are subject neither to effluent limitations in the permit, nor to the notification requirements under 40 C.F.R. § 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** <u>even</u> when <u>no</u> discharge occurs during the reporting period.

## 5. <u>Compliance Schedule</u>

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the

cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

## 6. <u>Twenty-four Hour Report</u>

Please be aware that the notifications can be sent by email to <u>water-enforcement-report@adeq.state.ar.us</u> or at 501-682-0624 for immediate reporting:

- A. The permittee shall report any noncompliance which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances to the Enforcement Branch of the Office of Water Quality of DEQ. 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 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.
  - 3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit.
- C. The Director may waive the written report on a case-by-case basis if the notification has been received within 24 hours to the Enforcement Branch of the Office of Water Quality of the DEQ.

#### 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. <u>Changes in Discharge of Toxic Substances for Industrial Dischargers including Existing</u> <u>Manufacturing, Commercial, Mining, and Silvicultural Dischargers</u>

The Director shall be notified as soon as the permittee 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 including those listed in 40 C.F.R. § 401.15 which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 C.F.R. § 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 including those listed in 40 C.F.R. § 401.15 which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 C.F.R. § 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 implemented through procedures outlined by APC&EC Rule 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 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 C.F.R. Part 2 and APC&EC Rule 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits, and effluent data shall not be considered confidential.

#### 13. Penalties for Falsification of Reports

The Arkansas Air and Water Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report,

plan, or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part 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.).

#### 14. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

## PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act and 40 C.F.R. § 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. **"7-Day average" ("average weekly")** 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
- 2. "Act" the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended
- 3. "Administrator" the Administrator of the U.S. Environmental Protection Agency
- 4. "APC&EC" the Arkansas Pollution Control and Ecology Commission
- 5. **"Applicable effluent standards and limitations"** 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
- 6. **"Applicable water quality standards"** 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(c) of the Act, and standards promulgated under (APC&EC) Rule 2, as amended
- 7. "Best Management Practices (BMPs)" activities, practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the State; includes treatment technologies, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw sewage; may include structural devices or nonstructural practices
- 8. **"Bypass"** the intentional diversion of waste streams from any portion of a treatment facility, as defined at 40 C.F.R. § 122.41(m)(1)(i)
- 9. **"Composite sample"** 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
- 10. **"Daily Discharge"** 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
- 11. "Daily Maximum" the highest allowable "daily discharge" during the calendar month
- 12. "Director" the Director of the Division 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. "Division" the Division of Environmental Quality (DEQ)
- 15. "*E. coli*" a sample consists of one effluent grab portion collected during a 24-hour period at peak loads; for *E. coli*, report the 7-Day Average as the geometric mean of all "daily discharges" within a calendar week and the Monthly Average as the geometric mean of all "daily discharges" within a calendar month, in colonies per 100 ml
- 16. **"Fecal Coliform Bacteria (FCB)"** a sample consists of one effluent grab portion collected during a 24-hour period at peak loads; for FCB, report the 7-Day Average as the geometric mean of all "daily discharges" within a calendar week and the Monthly Average as the geometric mean of all "daily discharges" within a calendar month, in colonies per 100 ml
- 17. "Grab sample" an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement
- 18. **"Industrial User"** a nondomestic discharger, as identified in 40 C.F.R. Part 403, introducing pollutants to a publicly owned treatment works (POTW)
- 19. **"Instantaneous flow measurement"** 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
- 20. **"Instantaneous Maximum"** no value measured during the reporting period may fall above the stated value
- 21. **"Instantaneous Minimum"** no value measured during the reporting period may fall below the stated value
- 22. "Monitoring and Reporting" when a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date; for monitoring requirements for an effluent characteristic of monthly or more frequently, the Discharge Monitoring Report (DMR) shall be submitted by the 25<sup>th</sup> of the month following the sampling; for monitoring requirements for an effluent characteristic of Quarterly, Semi-Annual, Annual, or Yearly, the DMR shall be submitted by the 25<sup>th</sup> of the month following the monitoring period end date
  - A. **MONTHLY** a calendar month or any portion of a calendar month for monitoring requirement frequency of once/month or more frequently.
  - B. **BI-MONTHLY** 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. 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
    - 2. 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** 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
- E. **ANNUAL or YEARLY** a fixed calendar year (January through December) or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year
- 23. **"Monthly Average"** 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 as the geometric mean of all "daily discharges" within a calendar month (see Part IV.15 and IV.16 above)
- 24. **"National Pollutant Discharge Elimination System"** 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
- 25. **"POTW"** Publicly Owned Treatment Works; a treatment works (see Part IV.29 below) which is owned by a state or municipality
- 26. "Reduction of CBOD<sub>5</sub>/BOD<sub>5</sub> and TSS Formula" [(Influent Effluent) / Influent] × 100
- 27. **"Severe property damage"** 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; does not include economic loss caused by delays in products
- 28. **"Sewage sludge"** the solids, residues, and precipitate separated from or created in sewage by the unit processes at a POTW; any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff that are discharged to or otherwise enter a POTW
- 29. "Treatment works" 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:

- "cfs" cubic feet per second
- "µg/l" micrograms per liter or parts per billion (ppb)
- "MGD" million gallons per day
- **"mg/l"** milligrams per liter or parts per million (ppm)
- **"ppm"** parts per million
- "s.u." standard units
- 31. **"Upset"** 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; does not include noncompliance to the extent caused

by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless, or improper operations

- 32. **"Visible sheen"** 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" Monday Friday.

#### **Final Statement of Basis**

This Statement of Basis is for information and justification of the permit requirements only. Please note that it is not enforceable. This permitting decision is for renewal of the discharge Permit Number AR0021717 with Arkansas Department of Energy and Environment – Division of Environmental Quality (DEQ) Arkansas Facility Identification Number (AFIN) 45-00021 to discharge to Waters of the State.

## 1. **PERMITTING AUTHORITY**

The issuing office is:

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

## 2. APPLICANT

The applicant's mailing address is:

City of Flippin - Flippin Wastewater Treatment Facility P.O. Box 40 Flippin, AR 72634

The facility address is:

City of Flippin - Flippin Wastewater Treatment Facility 222 East Industrial Drive Flippin, AR 72634

#### 3. PREPARED BY

The permit was prepared by:

Faizan Khan Staff Engineer NPDES Discharge Permits Section Office of Water Quality (501) 682-0670 Email: <u>faizan.khan@adeq.state.ar.us</u>

4. **PERMIT ACTIVITY** 

Carrie McWilliams, P.E. Engineer Supervisor NPDES Discharge Permits Section Office of Water Quality (501) 682-0915 Email: mcwilliamsc2@adeq.state.ar.us

Previous Permit Effective Date:November 1, 2017Previous Permit Expiration Date:October 31, 2022

The permittee submitted an application for a state construction permit and discharge permit modification on November 9, 2020, with additional information received by December 1,

2020 for administrative completeness. A request was received on May 27, 2021 to change the permit modification application to a revoke and reissue application. Since all submitted information received by May 27, 2021 satisfied the completeness requirements of a revoke and reissue application, and a complete application was submitted with 18 months of the expiration date of the previous permit, the revoke and reissue request was approved. The facility's treatment system will be modified, including the replacement of the existing bar screens with a new screening and grit removal system, addition of an oxidation ditch adjacent to the existing ditch, replacement of the existing final clarifiers with two (2) new clarifiers, and addition of a new sludge holding pond. The design flow at Outfall 001 will be increasing from 0.175 MGD to 0.35 MGD when the modified system is constructed and operating. The previous discharge permit is being reissued for a 5-year term in accordance with regulations promulgated at 40 C.F.R. § 122.46(a).

## DOCUMENT ABBREVIATIONS

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

APC&EC - Arkansas Pollution Control and Ecology Commission

BAT - best available technology economically achievable

BCT - best conventional pollutant control technology

BMP - best management practice

BOD<sub>5</sub> - five-day biochemical oxygen demand

BPJ - best professional judgment

BPT - best practicable control technology currently available

CBOD<sub>5</sub> - carbonaceous biochemical oxygen demand

CD - critical dilution

C.F.R. - 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

NH<sub>3</sub>-N - ammonia nitrogen

 $NO_3 + NO_2 - N$  - nitrate + nitrite nitrogen

NPDES - National Pollutant Discharge Elimination System

O&G - oil and grease

Rule 2 - APC&EC Rule 2 Rule 6 - APC&EC Rule 6 Rule 8 - APC&EC Rule 8 Rule 9 - APC&EC Rule 9 RP - reasonable potential SIC - standard industrial classification SSO - sanitary sewer overflow 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:

The compliance and enforcement history for this facility can be reviewed by using the following web link:

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInform ation/AR0021717\_%20Enforcement%20Review\_20220301.pdf

Based on this history and the reported permit limit exceedances, the facility is under a Consent Administrative Order (CAO), LIS 21-104, which requires compliance with an updated Corrective Action Plan (CAP) dated May 19, 2021.

## 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's mailing address and driving directions were removed from the cover page.
- 2. The coordinates for Outfall 001 were updated based on an inspection report dated August 18, 2020.
- 3. Tiered limits and requirements were added to Part I.A; Part I.A.1 was added for Tier I limits for the facility's existing, pre-construction treatment system and design flow of 0.175 MGD; Part I.A.2 was added for Tier II limits applicable for the post-construction treatment system and design flow of 0.35 MGD.
- 4. All existing mass limits and the concentration limits for TSS and NH<sub>3</sub>-N in Part I.A were updated to one decimal place per updated Office of Water Quality (OWQ) rounding procedures.

- 5. The following updates were made for the Tier II limits in Part I.A.2:
  - a. All existing mass limits were recalculated for the Tier II design flow of 0.35 MGD; see Section 12.C.1 of this Statement of Basis for more information.
  - b. The NH<sub>3</sub>-N concentrations limits for April were updated to 3.9 mg/l based on an updated modeling analysis. See Section 12.A of this Statement of Basis for more information.
  - c. The NH<sub>3</sub>-N (7-Day Average) concentration limit for November March was updated to 10.4 mg/l based on an updated modeling analysis. See Section 12.A of this Statement of Basis for more information.
- 6. A Schedule of Compliance for the submission of effluent temperature testing results during summer and winter was added in Part I.B. See Section 14 of this Statement of Basis for more information.
- 7. Part II.8 regarding the facility's transition to the modified treatment system was added.

## 6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION

Outfall 001 is located at the following coordinates based on an inspection report dated August 18, 2020 and confirmed with Google Earth using WGS84:

Latitude: 36° 16' 59.59" N; Longitude: 92° 35' 08.76" W

The receiving waters named:

Fallen Ash Creek, thence to the White River in Segment 4I of the White River Basin. The receiving stream with Assessment Unit AR\_11010003\_002 (closest downstream 3-digit reach code, which is assigned to the White River) 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. The drainage area for this outfall is 9.88 square miles, which is less than the 10 square mile watershed specified for secondary contact recreation in Rule 2.507. However, because the watershed area is significantly close to the 10 square mile primary contact threshold and the facility has submitted DMR data showing that it is capable of meeting the more stringent primary contact FCB limits will be continued from the previous permit.

# 7. 303(d) LIST, TOTAL MAXIMUM DAILY LOADS, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS

## A. 303(d) List

The receiving stream is not listed on the 2018 303(d) list. Therefore, no permit action is needed.

## B. Applicable Total Maximum Daily Load (TMDL) Reports

There are no applicable TMDLs for the receiving stream.

#### C. Endangered Species

No comments on the application were received from the USF&WS. The draft permit and Statement of Basis were sent to the USF&WS for their review.

#### D. Anti-Degradation

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Anti-degradation Policy and all other applicable water quality standards found in APC&EC Rule 2.

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

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

- A. Design Flow:
  - a. Before construction (Tier I): 0.175 MGD
  - b. After construction (Tier II): 0.35 MGD
- B. Type of Treatment:
  - a. <u>Before construction (Tier I)</u>: screening, oxidation ditch, final clarifiers, dosing tank, intermittent sand filter, ultraviolet disinfection, post-aeration.
  - b. <u>After construction (Tier II)</u>: screening and grit removal system, two (2) oxidation ditches, two (2) clarifiers, dosing tank, intermittent sand filter, ultraviolet disinfection, post-aeration, and sludge holding pond.
- 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 Rule 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

Currently, it does not appear the facility receives process wastewater from any significant industrial users as defined by 40 C.F.R. § 403.3(v). In accordance with 40 C.F.R. § 403.5(a)(1) and (b), General and Specific Pretreatment Prohibitions and reporting requirements are deemed appropriate at this time.

## 11. SEWAGE SLUDGE PRACTICES

Sludge will be managed in a sludge holding pond. Any change to the sludge disposal method shall be in accordance with Part III.B.6 of the permit.

## 12. DEVELOPMENT AND BASIS FOR PERMIT CONDITIONS

The Division of Environmental Quality has determined to issue a permit for the discharge described in the application. Permit requirements are based on federal regulations (40 C.F.R. Parts 122, 124, and Subchapter N), the National Pretreatment Regulation in 40 C.F.R. 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 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 C.F.R. § 124.7.

## Technology-Based Versus Water Quality-Based Effluent Limitations and Conditions

Following regulations promulgated at 40 C.F.R. § 122.44, the permit limits are based on either technology-based effluent limits pursuant to 40 C.F.R. § 122.44(a) or on State water quality standards and requirements pursuant to 40 C.F.R. § 122.44(d), whichever are more stringent as follows:

	Water Quality- Based		Technology- Based/BPJ		Previous Permit		Final Permit Limit		
Parameter	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	
CBOD <sub>5</sub>	10	15	25	40	10	15	10	15	
TSS	N/A	N/A	30	45	15	22.5	15.0	22.5	
NH3-N									
(April)	3.9*	3.9*	N/A	N/A	4	4	3.9*	3.9*	
(May – October)	2.0	3.0	N/A	N/A	2	3	2.0	3.0	
(November – March)	9.0	10.4*	N/A	N/A	9	10.5	9.0	10.4*	
DO	6.0 (Inst. Min.)		N/	N/A 6.0		6.0 (Inst. Min.)		6.0 (Inst. Min.)	
FCB (col/100 ml)									
(May – September)	200	400	N/A	N/A	200	400	200	400	
(October – April)	1000	2000	N/A	N/A	1000	2000	1000	2000	
pН	6.0-9.0 s.u.		6.0-9.	6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-9.0 s.u.	

\* Applicable only for Tier II requirements.

Parameter	Water Quality or Technology	Justification		
CBOD <sub>5</sub>	Water Quality	Water Quality Model dated February 10, 2022, CWA § 402(o), and previous permit		
TSS	Technology	40 C.F.R. § 122.44(1), and previous permit		
NH3-N	Water Quality	Rule 2.512, Water Quality Model dated February 10, 2022, CWA § 402(0), and previous permit		
DO	Water Quality	Rule 2.505, Water Quality Model dated February 10, 2022, CWA § 402(o), and previous permit		
FCB	Water Quality	Rule 2.507, CWA § 402(o), and previous permit		
рН	Water Quality	Rule 2.504, CWA § 402(o), and previous permit		

# A. Justification for Limitations and Conditions of the Final Permit

## Ammonia Nitrogen (NH<sub>3</sub>-N), applicable only for Tier II requirements

Based on an updated modeling analysis dated February 10, 2022, the Monthly Average and 7-Day Average NH<sub>3</sub>-N concentration limits during the month of April were updated from 4 mg/l to 3.9 mg/l, and the NH<sub>3</sub>-N 7-Day Average concentration limit during November – March was updated from 10.5 mg/l to 10.4 mg/l based on toxicity standards. The updated model was performed with updated stream hydraulics and to account for the facility's design flow increase from 0.175 MGD to 0.35 MGD.

## B. Anti-backsliding

The permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402(o) [40 C.F.R. § 122.44(1)]. 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(0)(2), CWA 303(d)(4), or 40 C.F.R. § 122.44(1)(2)(i).

The permit meets or exceeds the requirements of the previous permit.

## C. Limits Calculations

1. Mass Limits:

In accordance with 40 C.F.R. § 122.45(f)(1), all pollutants limited in permits shall have limitations expressed in terms of mass if feasible. 40 C.F.R. § 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 0.175 MGD for Tier I and 0.35 MGD for Tier II, and the following equation:

Mass (lbs/day) = Concentration (mg/l)  $\times$  Flow (MGD)  $\times$  8.34

2. 7-Day Average Limits:

The 7-day average limits for CBOD<sub>5</sub>, TSS, and NH<sub>3</sub>-N during May through October are based on Section 5.4.2 of the Technical Support Document for Water Quality-based Toxics Control:

7-day average limits = monthly average limits  $\times$  1.5

The 7-day average NH<sub>3</sub>-N limits during November through April are based on the requirements of Rule 2.512.

The 7-day average limits for FCB are based on Rule 2.507.

## D. 208 Plan (Water Quality Management Plan)

The 208 Plan, developed by the DEQ 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.

The 208 Plan is being updated to revise the facility design flow from 0.175 MGD to 0.35 MGD, and revise the monthly average NH<sub>3</sub>-N limit during April from 4.0 to 3.9 mg/l.

#### 13. SAMPLE TYPE AND FREQUENCY

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

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

	Previou	s Permit	Final Permit		
Parameter	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type	
Flow	five/week	instantaneous	five/week	instantaneous	
CBOD5	once/month	grab	once/month	grab	
TSS	once/month	grab	once/month	grab	
NH <sub>3</sub> -N	once/month	grab	once/month	grab	
DO	once/month	grab	once/month	grab	
FCB	once/month	grab	once/month	grab	
pН	once/month	grab	once/month	grab	

## 14. PERMIT COMPLIANCE SCHEDULE

A schedule of compliance has been included in Part I.B of the permit for the submission of effluent temperature test results during the summer and winter months. This requirement has been included since the referenced testing data was not submitted in EPA Form 2A, Table A as part of the permit application process. Compliance with all permit requirements is required on the effective date of the permit.

#### 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. <u>Application No. AR0021717 received November 9, 2020</u>, with all additional information received by May 27, 2021.
- B. Arkansas Water Quality Management Plan (WQMP).
- C. <u>APC&EC Rule 2.</u>
- D. <u>APC&EC Rule 3.</u>
- E. <u>APC&EC Rule 6, which incorporates by reference certain federal regulations included in</u> <u>Title 40 of the Code of Federal Regulations at Rule 6.104.</u>
- F. <u>40 C.F.R. Parts 122, 125, 133 and 403.</u>
- G. Discharge permit file AR0021717.
- H. Discharge Monitoring Reports (DMRs).
- I. "2018 Integrated Water Quality Monitoring and Assessment Report," DEQ.
- J. "2018 List of Impaired Waterbodies (303(d) List)," DEQ, May 2020.
- K. <u>USGS StreamStats web-based program.</u>
- L. Continuing Planning Process (CPP).
- M. "OWQ Guidelines for Decimal Places and Rounding Conventions in NPDES Permits" documented in a June 12, 2020 Interoffice Memorandum.
- N. Technical Support Document for Water Quality-based Toxic Control.
- O. Inspection Report dated August 18, 2020.
- P. <u>CAO LIS-21-104.</u>
- Q. Updated Corrective Action Plan dated May 19, 2021.
- R. Planning Review dated May 26, 2021.
- S. Executed CAO Letter dated October 5, 2021.
- T. Water Quality Model dated February 10, 2022.
- U. Enforcement Compliance Review dated March 1, 2022.
- V. Operator License Class Spreadsheet dated March 1, 2022.

#### 17. PUBLIC NOTICE

The public notice of the draft permit was published for public comment on July 3, 2022. The last day of the comment period was thirty (30) days after the publication date. No public comments were received on the draft permit.

A copy of the draft permit and public notice were sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Arkansas Department of Parks, Heritage, and Tourism, the EPA, and the Arkansas Department of Health.

#### 18. PERMIT FEE

In accordance with Rule 9.403(C)(1), the annual fee for the permit is calculated from the new Design Flow (Q, in MGD) as follows:

Fee =  $200 + (5,600 \times Q) = 200 + (5,600 \times 0.35) = 2,160$ 

This facility is billed under Fee Code B.

## 19. POINT OF CONTACT

For additional information, contact:

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