

**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.),

Halliburton Energy Services, Inc.  
Magnet Cove Plant

is authorized to discharge treated sanitary wastewater from a facility located as follows: 1743 Darby Lane, Magnet Cove, AR 72104, in Hot Spring County.

Facility Coordinates: Latitude: 34° 28' 24" N; Longitude: 92° 48' 30" W

The facility discharges to receiving waters named:

unnamed tributary, thence to Reyburn Creek, thence to Francois Creek, thence to the Saline River, thence to the Ouachita River in Segment 2C of the Ouachita River Basin.

The outfall is located at the following coordinates:

Outfall 001: Latitude: 34° 28' 19" N; Longitude: 92° 48' 27" 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: December 1, 2025  
Expiration Date: November 30, 2030

---

Stacie R. Wassell  
Deputy Director, Office of Water Quality  
Arkansas Department of Energy and Environment  
Division of Environmental Quality

November 26, 2025  
Issue Date

---

**PART I**  
**PERMIT REQUIREMENTS**

**SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 - treated sanitary 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>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, else specified)		Concentration (mg/l, else specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow	N/A	N/A	Report, MGD	Report, MGD	two/week	instantaneous
Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	0.18	0.26	10	15	once/quarter	grab
Total Suspended Solids (TSS)	0.26	0.39	15.0	22.5	once/quarter	grab
Ammonia Nitrogen (NH <sub>3</sub> -N)						
(April)	0.09	0.09	5.2	5.2	once/month	grab
(May – October)	0.18	0.26	10.0	15.0	once/quarter	grab
(November – March)	0.26	0.26	14.7	14.7	once/5 months	grab
Dissolved Oxygen (DO)	N/A	N/A	3.0 (Inst. Min.)		once/quarter	grab
Fecal Coliform Bacteria (FCB)			(colonies/100ml)			
	N/A	N/A	1000	2000	once/quarter	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month	grab

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 and prior to the receiving stream.

**SECTION B. PERMIT COMPLIANCE SCHEDULE**

None.

## **PART II OTHER CONDITIONS**

1. The operator of this wastewater treatment facility shall be licensed as at least Class II by the State of Arkansas in accordance with PC&EC Rule 3.
2. 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.
3. 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 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.

4. 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.
5. The permittee must maintain an inventory of spare parts for the UV disinfection unit as recommended by the manufacturer.

## 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 PC&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 PC&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 PC&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 statutes 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. **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, state, or local requirement, 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 PC&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 PC&EC Rule 6 and the provisions of PC&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. **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**

“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 (10) 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. 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 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. 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 ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated a minimum of once per year, 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. **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**

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, use the following link to access electronic filing: <https://cdx.epa.gov>. 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. **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 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.
- G. The chain of custody that records the sequence of custody, control, transfer, analysis, and measurement of the 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(l)]. 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 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.

## 6. **Twenty-four Hour Report**

Please be aware that the notifications can be sent by email to [EE.Water.Enforcement.Report@arkansas.gov](mailto:EE.Water.Enforcement.Report@arkansas.gov) 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. 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 by the Enforcement Branch of the Office of Water Quality.

## 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 including Existing Manufacturing, Commercial, Mining, and Silvicultural 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 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 PC&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 PC&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 and rules, 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 Water and Air 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”** 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 (also known as “average weekly”). The 7-Day Average for Fecal Coliform Bacteria (FCB), or *E. coli*, is the geometric mean of the “daily discharges” of all effluent samples collected during a calendar week in colonies, or most probable number (MPN) per 100 ml.
2. **“Act”** means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
3. **“Administrator”** means the Administrator of the U.S. Environmental Protection Agency.
4. **“Applicable standards and limitations”** means all State, interstate, and federal standards and limitations to which a “discharge,” a “sewage sludge use or disposal practice,” or a related activity is subject under the Act, including “effluent limitations,” water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices,” pretreatment standards, and “standards for sewage sludge use or disposal” under sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of the Act.
5. **“Applicable water quality standards”** means all water quality standards to which a discharge is subject under the 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 (PC&EC) Rule 2, as amended.
6. **“Best Management Practices (BMPs)”** means 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 material storage. BMPs may include structural devices or nonstructural practices.
7. **“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).
8. **“Composite sample”** means 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. **“CV”** means coefficient of variation.
10. **“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.

11. **“Daily Maximum”** discharge limitation means the highest allowable “daily discharge” during the calendar month.
12. **“Director”** means the Director of the Division of Environmental Quality.
13. **“Dissolved oxygen limit”** means
  - A. when limited in the permit as a minimum monthly average, the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month; **OR**
  - B. when limited in the permit as an instantaneous minimum value, that no value measured during the reporting period may fall below the stated value.
14. **“Division”** means the Division of Environmental Quality (**DEQ**).
15. **“E. coli”** means a sample that consists of one effluent grab portion collected during a 24-hour period at peak loads. For *E. coli*, report the Daily Maximum as the highest “daily discharge” during the calendar month, 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 or MPN per 100 ml.
16. **“Fecal Coliform Bacteria (FCB)”** means a sample that consists of one effluent grab portion collected during a 24-hour period at peak loads. For FCB, report the Daily Maximum as the highest “daily discharge” during the calendar month, 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 or MPN per 100 ml.
17. **“Grab sample”** means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
18. **“Industrial User”** means a source of Indirect Discharge. Indirect Discharge means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c), or (d) of the Act.
19. **“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.
20. **“Instantaneous Maximum”** (when limited in the permit as an instantaneous maximum value) means that no value measured during the reporting period may fall above the stated value.
21. **“Instantaneous Minimum”** (when limited in the permit as an instantaneous minimum value) means that no value measured during the reporting period may fall below the stated value.
22. **“Interference”** means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
  - A. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal; and
  - B. 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 Clean Water Act (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.

**23. “Monitoring and Reporting”**

NPDES permits specify monitoring and reporting requirements for specific periods defined as follows:

- A. **“MONTHLY”** means a calendar month, or any portion of a calendar month, for monitoring requirement frequency of once/month or more frequently.
  - B. **“BI-MONTHLY”** means two (2) calendar months or any portion of 2 calendar months for monitoring requirement frequency of once/2 months or more frequently.
  - C. **“QUARTERLY”** means:
    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; **OR**
    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”** means 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”** means 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.
24. **“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 as the geometric mean of all “daily discharges” within a calendar month.
25. **“National Pollutant Discharge Elimination System (NPDES)”** 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 Act.
26. **“NOEC”** means No Observed Effect Concentration.
27. **“Pass Through”** means a discharge which exits the POTW 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).
28. **“PC&EC”** means the Pollution Control and Ecology Commission.
29. **“Percent Removal”** means a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the effluent pollutant concentrations for a given time period.
30. **“PMSD”** means Percent Minimum Significant Difference.
31. **“POTW”** means Publicly Owned Treatment Works, as defined in 40 C.F.R. § 403.3(q).
32. **“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.

33. **“Sewage sludge”** means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings ([33 C.F.R. Part 159](#)), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.
34. **“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.
35. **Units of Measure:**
  - A. **“cfs”** means cubic feet per second.
  - B. **“MGD”** means million gallons per day.
  - C. **“µg/l”** means micrograms per liter, or parts per billion (ppb).
  - D. **“mg/l”** means milligrams per liter, or parts per million (ppm).
  - E. **“ppb”** means parts per billion.
  - F. **“ppm”** means parts per million.
  - G. **“s.u.”** means standard units.
  - H. **“lb/d”** means pounds per day.
  - I. **“col/100 ml”** means colonies per 100 milliliters, or most probable number (MPN) per 100 milliliters.
36. **“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 or improper operations.
37. **“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.
38. **“Week”** means a calendar week, consisting of the 7-day period of Sunday through Saturday.
39. **“Weekday”** means 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 AR0052345 with Arkansas Department of Energy and Environment - Division of Environmental Quality (DEQ) Arkansas Facility Identification Number (AFIN) 30-00009 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:

Halliburton Energy Services, Inc. - Magnet Cove Plant  
P.O. Box 10  
Malvern, AR 72104

The facility address is:

Halliburton Energy Services, Inc. - Magnet Cove Plant  
1743 Darby Lane  
Magnet Cove, AR 72104

### 3. PREPARED BY

The permit was prepared by:

Loretta Carstens, P.E.  
Professional Engineer  
NPDES Discharge Permits Section  
Office of Water Quality

Zachary Carroll, PhD, P.E.  
Engineer Supervisor  
NPDES Discharge Permits Section  
Office of Water Quality  
(501) 682-0625  
Email: [zachary.carroll@arkansas.gov](mailto:zachary.carroll@arkansas.gov)

### 4. PERMIT ACTIVITY

Previous Permit Effective Date: May 1, 2019  
Previous Permit Expiration Date: April 30, 2024

The permittee submitted a permit renewal application on October 2, 2023, with all additional information received by October 4, 2023. 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:

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  
ERW - extraordinary resource water  
ESA - Endangered Species Act  
ESW - ecologically sensitive waterbody  
FCB - fecal coliform bacteria  
gpm - gallons per minute  
MGD - million gallons per day  
MQL - minimum quantification level  
NAICS - North American Industry Classification System  
NSW - natural and scenic waterways  
NH<sub>3</sub>-N - ammonia nitrogen  
NO<sub>3</sub> + NO<sub>2</sub>-N - nitrate + nitrite nitrogen  
NPDES - National Pollutant Discharge Elimination System  
O&G - oil and grease  
PC&EC - Pollution Control and Ecology Commission  
Rule 2 - PC&EC Rule 2  
Rule 6 - PC&EC Rule 6  
Rule 8 - PC&EC Rule 8  
Rule 9 - PC&EC Rule 9  
RP - reasonable potential  
SIC - standard industrial classification

TDS - total dissolved solids  
TMDL - total maximum daily load  
TN - total nitrogen  
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 links:

[https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0052345\\_Enforcement%20Review\\_20231211.pdf](https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0052345_Enforcement%20Review_20231211.pdf)

**5. FINANCIAL ASSURANCE**

Participation in the trust fund is not required since the WWTP covered under this permit serves only one business.

**6. 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 permittee mailing address and driving directions have been removed from the cover page.
2. Parts III and IV were updated to the current standard conditions and definitions.
3. The decimal places for the CBOD<sub>5</sub> concentration limits have been removed to comply with the OWQ's latest rounding policy.

**7. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION**

The outfall is located at the following coordinates based on the previous permit and confirmed with Google Earth using WGS84:

Latitude: 34° 28' 19" N; Longitude: 92° 48' 27" W

The receiving waters named:

unnamed tributary, thence to Reyburn Creek, thence to Francois Creek, thence to the Saline River, thence to the Ouachita River in Segment 2C of the Ouachita River Basin. The receiving stream with Assessment Unit AR\_08040203\_924 (closest downstream 3-digit reach code assigned to Reyburn Creek) is a Water of the State classified for secondary contact recreation; a raw water source for domestic (public and private), industrial, and agricultural water supplies; the propagation of desirable species of fish and other aquatic life; and other compatible uses.

**8. 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 2022 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.

During review of the previous permit, the Arkansas Department of Parks, Heritage, and Tourism stated that the *Etheostoma parvipinne* (goldstripe darter) is a species of state concern known to occur in Reyburn Creek at or within five (5) miles downstream of the outfall.

The limits in the permit are designed to protect all beneficial uses of the receiving waters, including propagation of desirable species of fish and other aquatic life as well as other species that are directly or indirectly affected by the receiving waters, which includes the above species of concern. Therefore, DEQ has determined that the final permit limits will serve to help protect the species of concern identified above.

**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 PC&EC Rule 2.

**9. OUTFALL, TREATMENT PROCESS DESCRIPTION, AND FACILITY CONSTRUCTION**

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

**A. Design Flow: 0.0021 MGD**

- B. Type of Treatment: septic tank, pretreatment tank (where alkalinity will be added as needed), 3 AX20 treatment pods in parallel, 1 AX20 treatment pod to be used as a polishing unit, and UV disinfection located within the polishing AX20 unit
- C. Discharge Description: treated sanitary wastewater
- D. Facility Status: This facility was evaluated using the NPDES Permit Rating Worksheet (MRAT) to determine the correct permitting status. Since the facility's MRAT score of 10 is less than 80, this facility is classified as a minor industrial.
- 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.

## 10. ACTIVITY

Under the Standard Industrial Classification (SIC) code of 2899 or North American Industry Classification System (NAICS) code of 325998, the applicant's activities are the operation of a chemical plant. It is important to note that only treated sanitary wastewater is permitted to be discharged under this permit.

## 11. SEWAGE SLUDGE PRACTICES

Sludge will be removed from the septic tank as needed and hauled to a POTW or landfill permitted to accept the waste.

## 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) and rules 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:

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Final Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
CBOD <sub>5</sub>	10	15	N/A	N/A	10.0	15.0	10	15
TSS	15.0	22.5	N/A	N/A	15.0	22.5	15.0	22.5
NH <sub>3</sub> -N								
(April)	5.2	5.2	N/A	N/A	5.2	5.2	5.2	5.2
(May – October)	10.0	15.0	N/A	N/A	10.0	15.0	10.0	15.0
(November – March)	14.7	14.7	N/A	N/A	14.7	14.7	14.7	14.7
DO	3.0 (Inst. Min.)		N/A		3.0 (Inst. Min.)		3.0 (Inst. Min.)	
FCB (col/100ml)	1000	2000	N/A	N/A	1000	2000	1000	2000
pH	6.0-9.0 s.u.		N/A		6.0-9.0 s.u.		6.0-9.0 s.u.	

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

Parameter	Water Quality or Technology	Justification
CBOD <sub>5</sub>	Water Quality	Water Quality Model dated January 17, 2019 (and reviewed May 17, 2024), CWA § 402(o), and previous permit
TSS	Water Quality	Water Quality Model dated January 17, 2019 (and reviewed May 17, 2024), CWA § 402(o), and previous permit
NH <sub>3</sub> -N	Water Quality	Rule 2.512, Water Quality Model dated January 17, 2019 (and reviewed May 17, 2024), CWA § 402(o), and previous permit
DO	Water Quality	Rule 2.505, Water Quality Model dated January 17, 2019 (and reviewed May 17, 2024), CWA § 402(o), and previous permit
FCB	Water Quality	Rule 2.507, CWA § 402(o), and previous permit
pH	Water Quality	Rule 2.504, CWA § 402(o), and previous permit

No new information was received to warrant adding, removing, or revising any limitations in the permit. Therefore, the limitations in the permit are consistent with the limitations in the previous permit.

**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(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 C.F.R. § 122.44(l)(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 mass loadings uses a design flow of 0.0021 MGD and the following equation:

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

2. Daily Maximum Limits:

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

$$\text{daily maximum limits} = \text{monthly average limits} \times 1.5$$

The daily maximum NH<sub>3</sub>-N limits for the months of November through April are based on the requirements of Rule 2.512.

The daily maximum limit for FCB is based on Rule 2.507.

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

The 208 Plan, developed by 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.

There are no updates to the 208 Plan occurring with this permit renewal.

**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)(1)].

Requirements for sample type and sampling frequency were based on recommended

frequencies for self-monitoring of discharges of less than 0.05 MGD from Chapter 5 of the CPP.

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Flow	two/week	instantaneous	two/week	instantaneous
CBOD <sub>5</sub>	once/quarter	grab	once/quarter	grab
TSS	once/quarter	grab	once/quarter	grab
NH <sub>3</sub> -N				
(April)	once/month	grab	once/month	grab
(May – October)	once/quarter	grab	once/quarter	grab
(November – March)	once/5 months	grab	once/5 months	grab
DO	once/quarter	grab	once/quarter	grab
FCB	once/quarter	grab	once/quarter	grab
pH	once/month	grab	once/month	grab

#### 14. PERMIT COMPLIANCE SCHEDULE

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

#### 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 write the permit:

- A. Application No. AR0052345 received October 2, 2023, with all additional information received by October 4, 2023.
- B. Arkansas Water Quality Management Plan (WQMP).
- C. PC&EC Rule 2, codified in 8 CAR Part 21.
- D. PC&EC Rule 3, codified in 8 CAR Part 22.
- E. PC&EC Rule 6, codified in 8 CAR Part 25, which incorporates by reference certain federal regulations included in Title 40 of the Code of Federal Regulations at Rule 6.104, codified at 8 CAR § 25-104.
- F. 40 C.F.R. Parts 122 and 125.
- G. Discharge permit file AR0052345.
- H. Discharge Monitoring Reports (DMRs).
- I. “2022 Integrated Water Quality Monitoring and Assessment Report,” DEQ.
- J. “2022 List of Impaired Waterbodies (303(d) List),” DEQ.

- K. USGS StreamStats web-based program.
- L. Continuing Planning Process (CPP).
- M. “OWQ Guidelines for Decimal Places and Rounding Conventions in NPDES Permits,” documented in a February 28, 2023 Interoffice Memorandum.
- N. OWQ guidance memorandum “Recommended Monitoring Frequencies and Sample Types for NPDES Permits,” July 31, 2023.
- O. Technical Support Document for Water Quality-based Toxic Control.
- P. [Inspection Report](#) dated December 19, 2018.
- Q. [Enforcement Review Memo](#) dated December 11, 2023.
- R. [Planning Review Memo](#) dated December 6, 2023.
- S. [NPDES Permit Rating Spreadsheet \(MRAT\)](#) dated December 8, 2023.
- T. [Operator License Class Spreadsheet](#) dated December 8, 2023.
- U. [Water Quality Model](#) dated January 17, 2019 (and reviewed May 17, 2024).

## 17. PUBLIC NOTICE

The public notice of the draft permit was published for public comment on October 26, 2025. The last day of the comment period was thirty (30) days after the publication date. No public comments were received on the draft permit.

Copies 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 Design Flow (Q, in MGD) as follows:

$$\text{Fee} = \$200 + (5,600 \times Q) = \$200 + (5,600 \times 0.0021) = \$212$$

## 19. POINT OF CONTACT

For additional information, contact:

Zachary Carroll, PhD, P.E.  
Permits Branch, Office of Water Quality  
Division of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317  
Telephone: (501) 682-0625