

**AUTHORIZATION FOR A NO-DISCHARGE WATER PERMIT UNDER 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 APC&EC Regulation No. 17 Arkansas Underground Injection Control (UIC) Code.

**Butterball, LLC**

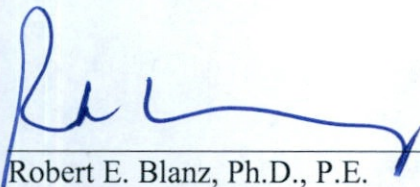
is authorized to construct and operate a septic tank and subsurface fluid distribution system for wastewater generated during operation of a feed mill at 3726 Hwy. 62 W. Yellville, Arkansas 72687 in Marion County. The facility is located at the following coordinates:

Latitude: 36° 15' 9.4" N Longitude: 92° 43' 52.4" W

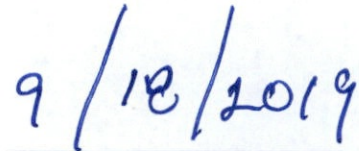
Operation shall be in accordance with all conditions set forth in this permit.

Effective Date: September 18, 2019

Expiration Date: September 17, 2024



Robert E. Blanz, Ph.D., P.E.  
Associate Director, Office of Water Quality  
Arkansas Department of Environmental Quality



Issue Date

**Part I**  
**PERMIT REQUIREMENTS**

**LIMITATIONS AND MONITORING REQUIREMENTS:**

The following table details the constituent limits, monitoring frequencies, and the requirements for reporting results to ADEQ for each respective parameter listed in the table heading. Samples shall be representative of the combined wastewater distributed from the septic tank to the subsurface fluid distribution fields.

Table 1			
Waste Analysis			
Parameter	Maximum Limit	Reporting Unit	Monitoring Frequency
Total Dissolved Solids	Report	mg/l	Annually
Chlorides			
Sulfates			
Oil and Grease			
pH			
Arsenic			
Cadmium			
Copper			
Chromium (total)			
Lead			
Mercury			
Molybdenum			
Nickel			
Selenium			
Zinc			

**Part II**  
**SPECIFIC CONDITIONS**

1. This permit is for the construction and operation of a septic tank and subsurface fluid distribution system for wastewater generated during operation of a feed mill. This type of system is also classified as a Class V shallow injection well under the provisions of Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 17.501. Wastewater entering the system includes wastewater from Truck Wash System, Liquid Rail Receiving System, Boiler System and Tank Farm Containment. Sanitary wastewater is discharged to a separate system permitted by the Arkansas Department of Health.
2. The waste management system shall be constructed and operated in accordance with the June 2019 Waste Management Plan (WMP). If the WMP is inconsistent with this permit, the waste management system shall be operated in accordance with the terms of the permit and the WMP shall be revised to conform to the permit conditions.
3. The Project Engineer shall submit to the Arkansas Department of Environmental Quality (ADEQ) two notifications: the first shall be 24 hours before the start of construction; the second shall be within 24 hours of completion. Operations shall not commence for the new or modified waste removal facility until the permittee has obtained written approval from the Department.
4. Under the provisions of APC&EC Regulation No. 17.301 and Title 40 of the Code of Federal Regulations (CFR) Parts 144 and 146, promulgated under Part C of the Safe Drinking Water Act (SDWA), no owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that may allow the movement of fluid containing any contaminant into an underground source of drinking water.
5. Waste shall not be discharged from this operation to the waters of the State or onto the land in any manner that may result in runoff to the waters of the State or ponding on the surface of the land.
6. Bypassing of the waste management system is prohibited and may result in the revocation of this permit and/or other appropriate enforcement action by the Department.
7. The system is designed for a volume of waste of 7,975 gallons per day. There shall be no increase in the volume of the waste being treated by the waste management system beyond the designed maximum.
8. The system shall be inspected and maintained annually by a Qualified Service Technician for the following items:
  - a. Check thickness of sludge and scum;
  - b. Clean effluent filters;
  - c. Make necessary repairs to pumps, tanks, valves, or hydrosplitters.
  - d. Septic tanks should be pumped if the bottom of the scum mat is less than three (3) inches from the bottom of the effluent filter or the sludge layer is less than twelve (12) inches from the bottom of the effluent filter.
  - e. If septic tanks are pumped, inspect the tanks for cracks in the walls or baffles, signs of deterioration, or other issues that will affect the life of the septic tanks.

9. The permittee must maintain current and complete records of all activities related to the removal of solid materials, oil, grease, wastewater, etc., from the operation. The following information must be recorded and made available to ADEQ personnel on request:
  - a. Date of the activity;
  - b. Volume or weight of material removed;
  - c. Type of material removed;
  - d. Interim or final destination of the material discarded;
  - e. Complete identification of the carrier(s) transporting the material;
  - f. If the waste is to be recycled or reused, document the name and address of the receiving entity or firm.
  
10. Should the facility under this permit cease operations, the permittee shall submit to the Department, for approval, a closure plan for the system's storage and treatment structures within sixty (60) days of the final day of operation.
  
11. Wastes analyses required by Part I of the Permit are due by the May 1st of each year for the previous permitted months of January to December (i.e. Waste Analysis is due on May 1, 2020, for the 2019 calendar year). Waste analysis for the 2019 operating year may be waived upon request to DEQ if the facility is not fully constructed or operational.

**Part III**  
**STANDARD CONDITIONS**

**1. Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.) and is grounds for civil and administrative enforcement action; for permit termination, revocation and reissuance, or modification; or for rejection of a permit renewal application.

**2. Penalties for Violations of Permit Conditions**

The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.) 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 both for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to a civil penalty 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**

- A. This permit may be modified; revoked and reissued; or terminated for cause including, but not limited to the following:
- i. Violation of any terms or conditions of this permit;
  - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
  - iii. 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; or
  - iv. Failure of the permittee to comply with the provisions of Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 9 (Fee Regulation).
- B. The filing of a request by the permittee for a permit modification; revocation and reissuance; termination; or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**4. Civil and Criminal Liability**

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 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.).

**5. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act and Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

**6. 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.

**7. 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.

**8. 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.

**9. 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 no-discharge permits as described in APC&EC Regulation No. 9 (Fee Regulation). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR Parts 122.64 and 124.5(d), as adopted in APC&EC Regulation No. 6 and the provisions of APC&EC Regulation No. 8.

**10. 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 and trained operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

**11. Duty to Mitigate**

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

**12. Removed Substances**

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be discarded in an approved manner such as to prevent any pollutant from such materials from entering the waters of the State.

**13. Reporting of Violations and Unauthorized Discharges**

- A. Any violations to this permit must be reported to the Enforcement Branch of the Department immediately (within 24-hours). Any leaks or seeps shall be reported to the Department and appropriately corrected. Any discharge from the fluids storage system such as an overflow, a broken pipe, etc., shall be immediately reported to the Department.
- B. The operator shall visually monitor and report immediately (within 24 hours) to the Enforcement Branch any unauthorized discharge from any facility caused by dike or structural failure; equipment breakdown; human error; etc., and shall follow up with a written report within five (5) days of such occurrence. The written report shall contain the following:
  - i. A description of the permit violation and its cause;
  - ii. The period of the violation, including exact times and dates;
  - iii. If the violation has not been corrected, the anticipated time expected to correct the violation; and
  - iv. Steps taken or planned to reduce, eliminate, and prevent the recurrence of the violation.
- C. Reports shall be submitted to the Enforcement Branch at the following address:

Arkansas Department of Environmental Quality  
Office of Water Quality, Enforcement Branch  
5301 Northshore Dr.  
North Little Rock, Arkansas 72118  
Fax (501) 682-0880

Or

[Water-enforcement-report@adeq.state.ar.us](mailto:Water-enforcement-report@adeq.state.ar.us)

**14. Penalties for Tampering**

The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.) 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.

**15. Retention of Records**

The permittee shall retain records of all monitoring information, 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.

**16. 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 any substances or parameters at any location.

**17. Planned Changes**

The permittee shall give the Department a notice of 180 days and provide the necessary information to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility.

**18. 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.

**19. 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.

**20. 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; 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.



**21. 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. Conditions of this permit will continue in effect past the expiration date pending issuance of a new permit, if:

- A. The permittee has submitted a timely and complete application; and
- B. The Director, through no fault of the permittee, does not issue a new permit prior to the expiration date of the previous permit.

**22. Signatory Requirements**

- A. All applications, reports or information submitted to the Director shall be signed and certified. All permit applications shall be signed as follows:
  - i. 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; or
    - 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.
  - ii. For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
  - iii. 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, or
    - 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:

- i. The authorization is made in writing by a person described above.
  - ii. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  - iii. The written authorization is submitted to the Director.
- C. 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.”

**23. Availability of Reports**

Except for data determined to be confidential under the Arkansas Trade Secrets Act, Ark. Code Ann. § 4-75-601 *et seq.*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. The name and address of any permit applicant or permittee, permit applications, and permits shall not be considered confidential.

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

**25. 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 statute, ordinance policy, or regulation.

**Part IV**  
**DEFINITIONS**

“**Act**” means the Arkansas Water and Air Pollution Control Act (A.C.A. Sec. 8-4-101 et seq.), as amended.

“**APC&EC**” means the Arkansas Pollution Control and Ecology Commission.

“**Department**” means the Arkansas Department of Environmental Quality (ADEQ).

“**Director**” means the Director of the Arkansas Department of Environmental Quality.

“**Septic System**” means a “well” that is used to emplace sanitary waste below the surface and is typically comprised of a septic tank and subsurface fluid distribution system or disposal system. (See APC&EC Reg. 17.201)

“**Sewage sludge**” means the solids, residues, and precipitate separated from or created in sewage by the unit processes a publicly-owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff that are discharged to or otherwise enter a publicly-owned treatment works.

“**s.u.**” means standard units.

## STATEMENT OF BASIS

This Statement of Basis is for information and justification of the permit limits only and is not enforceable. This permit decision is for issuance of a no-discharge operation under permit number 5329-W and AFIN 45-00253.

### 1. Permitting Authority

Arkansas Department of Environmental Quality  
Office of Water Quality, Permits Branch  
5301 Northshore Dr.  
North Little Rock, Arkansas 72118-5317

### 2. Applicant

Butterball, LLC  
Butterball Feed Mill-Yellville, AR  
One Butterball Ln.  
Garner, AR 27529

### 3. Facility Location

The facility is located as follows: 3726 Hwy. 62 W. to nearest community of Yellville in Marion County, Arkansas. The facility is located at the following coordinates:

Latitude: 36° 15' 9.4" N Longitude: 92° 43' 52.4" W

### 4. Consultant for this Facility

Floyd Cotter  
SCS Engineers  
7311 W. 130th St., Ste. 100  
Overland Park, KS 66213

### 5. Waterbody Evaluation

The facility is located in Stream Segment 4I of the White River basin, which is not in the Nutrient Surplus Area. Surrounding areas were evaluated to determine if any Extraordinary Resource Waters (ERWs), Ecologically Sensitive Waterbodies (ESWs), Natural or Scenic Waterbodies (NSWs), or impaired streams in the 2016 ADEQ 303(d) list are near the facility. The waterbody evaluation determined that the facility is greater than ten miles from waterbodies with these designations. The site meets the required setbacks of the permit application; therefore, no additional permit requirements are necessary.

**6. Applicant Activity**

Under the standard industrial classification (SIC) code 2048 or North American Industry Classification System (NAICS) code 311119, the applicant activities are for the construction and operation of a feed mill. This permit is for a septic tank and subsurface fluid distribution system for wastewater from a feed mill.

**7. Waste System, Storage, and Treatment Components**

Wastewater will be collected from the multiple processes, including the Truck Wash System, Liquid Rail Receiving System, Boiler System, and Tank Farm Containment. Not all wastewater generated by these processes will be directed to the wastewater system. Wastewater from some processes will be collected and transported for off-site disposal. Sanitary wastewater is collected and sent to a separate septic system permitted by the Arkansas Department of Health.

Truck Wash System

The truck wash system rinses and disinfects inbound (empty) feed trucks. One truck enters the enclosed building. Rinse water from the truck wash will be collected and piped to the wastewater system. Approximately 1,480 gallons per day of clean rinse water will be collected and piped to the wastewater system from the automatic rinse. Manual rinse will generate approximately 380 gallons per day.

As the truck leaves, a disinfecting spray header will be activated. The disinfecting spray will be collected via grated floor trenches and stored in an in-ground pump tank for transfer to an above ground storage tank. The collected disinfecting spray will be stored and pumped to trucks for proper disposal. Disinfecting spray will not enter the wastewater system.

Liquid Rail Receiving System

The liquid rail receiving system supplies animal fat and vegetable oil to the feed mill. During unloading, plant steam will be applied to an internal heating coil within the rail cars to reduce viscosity and result in condensate. Approximately 1,200 gallons per week of condensate will be piped via hose connection and gravity flow to the wastewater system.

The spill containment area for the liquid rail receiving system will not be connected to the wastewater system. The spill recovery plan is to recirculate the product to the delivery tank or pump truck collection for proper disposal.

Boiler System

Wastewater from the boiler system will be collected using floor drains within the boiler building. The collected wastewater will be piped to the wastewater system by gravity flow. The estimated daily flow is 3,912 gallons. From the softener regeneration process, the estimated flow to the wastewater system is 1,962 gallons per day.

Tank Farm Containment

Storage tank exterior walls and the containment area without chemical additives will be periodically washed. Minor traces of feed mill dust, animal fat, and vegetable oil may be present in this wash

water. A sump pit manual valve will be opened to drain the wash water by gravity flow to the wastewater system. Washing the storage tank exterior walls and the containment area is estimated to generate less than 300 gallons per use.

#### Waste Disposal

Wastewater will enter a tank for equalization of temperature and concentrations. Wastewater then is collected in a pump wet well before distribution to one of the two separate fields. The pump tank is equipped with a duplex pump station and controls to alternate the operation cycles to apply half of the daily flow to each of the two separate fields. Each field has three subzones. The force main piping will be used to deliver the flow to fields and cross connected. Valves will be installed to allow for manual operation if one of the pumps is inoperable. Each subzone (Field 1 through Field 6) has a loading rate of 0.75 gallons per day per square foot.

### **8. Storage Volume Limits**

The storage volume of 15,950 gallons is required for the waste generated at the facility. Required storage is based on the size of the facility and the amount of waste produced. The facility will have approximately 17,699 gallons of storage.

### **9. Basis for Permit Conditions**

The Arkansas Department of Environmental Quality has made a determination to issue a permit for the no-discharge facility as described in the application and waste management plan. Permit requirements and conditions are authorized pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 *et seq.* and Ark. Code Ann. § 8-4-201 *et seq.*), regulations promulgated thereunder, and APC&EC Regulation No. 17 Arkansas Underground Injection Control (UIC) Code.

#### Part I Permit Requirements

##### i. Monitoring Frequency

The monitoring frequency of once annually is to ensure that a sample of what is entering the system is measured and recorded for future reference. Changes to monitoring requirements or frequency may be requested by the permittee at the next renewal. The Department will consider the request based on data, renewal material, and facts available at that time.

##### ii. Waste Monitoring and Reporting Requirements

###### a. Reporting requirements for Total Dissolved Solids (TDS), Chlorides, and Sulfates in the wastewater

The wastewater contains TDS, chlorides, and sulfides. Reporting of these parameters will aid in determining if any changes noted in surface waters may be related to operation of the facility.

###### b. Reporting requirements for Oil and Grease in the wastewater

The wastewater may contain levels of oil and grease. Excessive levels could become a source of pollutants in groundwater.

c. Reporting requirements for pH of the wastewater

The pH of the wastewater must be reported to ensure that it will not negatively impact the pH of the soil.

d. Reporting requirements for arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc in the wastewater

The wastewater may contain levels of these metals. Soil particles and interaction with organic compounds may control the mobility of these metals. Monitoring of these is needed to determine the potential of accumulation of metals in the soil to concentrations that could have adverse effects on the environment.

Part II Special Conditions

iii. No runoff or discharge requirement

This condition is adapted from 40 C.F.R. Part 257.3-3 and is included to ensure that the permittee does not cause a discharge of pollutants into the waters of the State.

iv. No Bypassing the treatment system

This condition was added to the permit in order to ensure the wastewater receives the proper treatment.

v. No increase in volume of waste

Septic systems with subsurface dispersal are designed to treat a specific amount of wastewater. An increase in volume of wastewater going to the septic system could cause the septic system to fail and the soils to become saturated.

vi. Annual inspections

Inspections are required in order to ensure the system is operating properly and the tanks are not cracked.

vii. Maintain records

This condition is required in order to verify that any waste removed from the treatment system is properly disposed of at a permitted facility.

viii. Buffer distances

Minimum buffer distances are required between the leach field and areas that may be vulnerable to water pollution in order to minimize the risk of nutrients or pollutants leaving the field and reaching surface waters. Buffer distances are generally accepted scientific knowledge and engineering practices.

ix. Requirements for a closure plan

This condition is required to ensure that the permittee takes all of the necessary means to adequately close this type of system, which includes removal of all the waste from the system and properly filling or collapsing the septic systems.

x. Requirements for annual reporting of waste analysis

This condition is required to ensure that the permittee is monitoring the parameters listed in Part I of the permit. Changes to monitoring requirements or frequency may be requested by the permittee at the next renewal. The Department will consider the request based on data, renewal material, and facts available at that time.

Part III Standard Conditions

Standard Conditions have been included in this permit based on generally accepted scientific knowledge, engineering practices and the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

Part IV- Definitions

All definitions in Part IV of the permit are self-explanatory.

**10. Point of Contact**

The following staff contributed to the preparation of this permit:

Katherine McWilliams  
Engineer  
Permits Branch, Office of Water Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317  
501-682-0651  
E-mail: [mcwilliamsk@adeq.state.ar.us](mailto:mcwilliamsk@adeq.state.ar.us)

Technical review

Jamal Solaimanian PhD., PE  
Engineer Supervisor, No Discharge Section  
Permits Branch, Office of Water Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317  
501-682-0620  
E-mail: [jamal@adeq.state.ar.us](mailto:jamal@adeq.state.ar.us)

**11. Annual Fee**

In accordance with APC&EC Regulation No. 9, the annual fee for this permit is \$500.00.



**12. Sources**

The following Sources were used to draft the permit:

- A. APC&EC Regulation No. 8, Administrative Procedures, as amended.
- B. APC&EC Regulation No. 9, Fee Regulation, as amended.
- C. APC&EC Regulation No. 17, Arkansas Underground Injection Control (UIC) Code, as amended.
- D. 40 C.F.R. Part 144 and 146.
- E. Integrated Water Quality and Assessment Report (305(b) Report).
- F. Arkansas Water and Air Pollution Control Act.
- G. Arkansas Department of Health, "Rules and Regulations Pertaining to Onsite Wastewater Systems."
- H. Application No. 5329-W received March 6, 2019.
- I. Additional information received up to July 5, 2019.

**13. Public Notice**

The draft permit was public noticed on July 25, 2019. A total of nineteen (19) comments were raised by ten (10) separate commenters.

**RESPONSE TO COMMENTS  
FINAL PERMITTING DECISION**

Permit No.: 5329-W

Applicant: Butterball, LLC  
Butterball Feed Mill-Yellville, AR

Prepared by: Katherine McWilliams

The following are responses to comments received regarding the draft permit number above and are developed in accordance with regulations promulgated at APCEC Regulation No. 8 Administrative Procedures and A.C.A. §8-4-203(e)(2).

**Introduction**

The above permit was submitted for thirty-day (30-day) public comment on July 25, 2019. The DEQ - Office of Water Quality (OWQ) conducted one (1) public hearing on the proposed permit. The comment period was extended fourteen (14) additional days at the requests of multiple commenters. The public comment period ended on September 9, 2019.

This document contains a summary of the comments that the OWQ received during the public comment period. A summary of the changes to the permit can be found on the last page of this document.

The following people or organizations sent comments to the OWQ during the public notice and public hearing. A total of nineteen (19) comments were raised by ten (10) separate commenters.

	Commenter	Number of Comments Raised
1.	Scott Yaich	1
2.	David Mervis	1
3.	Elizabeth Vanderstek	2
4.	Jess Vanderstek	2
5.	Edie Stahl	1
6.	Christopher Carter	1
7.	Jessie Green	4
8.	Ray Stahl	1
9.	Steve Blumreich	5
10.	Butterball, Inc.	1

**Comment 1** Yeah, my name is Scott Yaich. I'm here. My address is 361 Sycamore Spring Place in Mountain Home. I'm here tonight representing the Friends of the North Fork and White Rivers organization. I'm on the board of that organization and I want to thank Representative Fortner and ADEQ for having this hearing. We're here primarily tonight to learn. I almost wish the informal question and answer part was before the formal part because we don't know as much about the project as we like to, but that's why we came. Our organization's mission is maintaining high standards and water quality in the North Fork and White Rivers and of course that means paying attention to what's going on throughout the watersheds of those rivers and this Butterball plant is obviously a very big project. It's very close to Georges Creek and Crooked Creek, which obviously provide input to the White River and the primary focus of our mission. So we're interested in what the impacts of the project as a whole are and particularly the...in particular tonight the project in question. The questions we'd like to put in the record and see answered as we go through the process relate to the septic system and the effluent. What...you know we don't know and are interested in learning more about the quantity of fluid that will go into the septic field, the constituents, the chemical constituents of the effluent, we're not really clear on what's going to be in the water and how that might interact with the geology in the area and filtered through the septic field. We're interested in knowing more about how much effluent and what chemicals constituents might make their way to Georges Creek and then ultimately to Crooked Creek and then in and again in what quantities. So those are the primary questions we've got. We just like I say want to know more about what we... what the project proponents expect to see as the end result once the project is in place and operational knowing this is going to be operating for years and years and years. There's going to be an accumulative effect of putting that material out into the septic field and we're just interested in knowing more about what that is going end up producing in terms of like I say the chemical and uh constituents primarily. We...Another question we have we like to know if there's a plan B so to speak. I mean if we begin to see pollution seeping its way through the groundwater into the Georges Creek in detectable amounts. We're wondering if the project includes or Butterball has a plan for what might be able to be done to alleviate that problem if it occurred down the road. In other words is there a plan B if we see issues arise down the road over time? And the final thing we would like to ask is a request for an extension of the comment period. Like I say we're at the front end of, uh we are as an organization of learning more about the project and we want to make good sound science based comment ultimately when we provide our written comments so we'd like to know as much as we can about the project so we're not going off half-baked and offering thoughts that as I say could be answered with research we that hope to do and if we can get an extension to the comment period, we do more of that. That's all for us. Again thank you for the time.

Commenter: Scott Yaich

**Response:** The system is designed for a volume of 7,975 gallons per day as stated in the Waste Management Plan and draft permit. Condition No. 7 of Part II of the permit prohibits any increase in the volume of waste being treated beyond the designed maximum.

According to the Waste Management Plan, wastewater is collected from multiple processes, including the Truck Wash System, Liquid Rail Receiving System, Boiler System, and Tank Farm Containment. From the Truck Wash System, approximately 1,480 gallons per day of clean rinse water will enter the system from the automatic rinse, and approximately 380 gallons per day will enter the system from the manual rinse. From the Liquid Rail Receiving System, approximately 1,200 gallons per week of condensate will enter the system. From the Boiler System, approximately 3,912 gallons per day will enter the system, and approximately 1,962 gallons per day from the softener regeneration process will enter the system. From the Tank Farm Containment, approximately 1 gallon per day or less than 300 gallons per use will enter the system. The majority of wastewater entering the system will be from the Boiler System and softener regeneration process.

According to the boring log for the east fields from the Engineer's Report, bedrock was encountered approximately eight (8) feet below the surface. According to the boring log for the west fields from the Engineer's Report, bedrock was not encountered within the limits of the equipment which was approximately twelve (12) feet. Soil pits for each field (1 through 6) indicated that bedrock was greater than 48 inches from the bottom of the trenches, and the loading rate for each field was determined to be 0.75 gallons per day per square feet. Trenches for lateral lines are designed to have soil separation from the bottom of the trench to the true water table (aquifer) and bedrock in order for containments to attenuate and prevent the rapid migration of contaminants with groundwater. Soils analysis and information in the Waste Management Plan was provided by a Soil Certified Designated Representative. According to the Engineer's Report, the soil between the bottom of the trench and bedrock consisted primarily of sandy red clay, which will filter wastewater prior to reentry into the hydrologic cycle.

Onsite wastewater treatment systems have different life spans, which depend on the soil present in the fields, system maintenance, and wastewater characteristics. The subsurface fluid distribution system was designed in conjunction with Professional Soil Classifiers and Professional Engineers (P.E.s) registered in the State of Arkansas in accordance with best engineering practices. The system design took in consideration loading rates recommended for the soil types, depth and duration of seasonal water table, onsite soil percolations rates, and in consideration of design guidance contained in the Arkansas Department of Health (ADH), Rules and Regulations Pertaining To Onsite Wastewater Systems. The permittee will be required to monitor parameters in the wastewater listed in Table I of Part I of the permit.

The permit is a no-discharge permit. Condition No. 5 of Part II of the permit prohibits discharge from the operation to waters of the State or onto land in any manner that may result in runoff to waters of the State or ponding on the surface of the land. Discharges from the system would be a violation and require reporting to the Enforcement Branch of the OWQ and corrective action to be taken. Condition No. 13 of Part III of the permit outlines reporting of violations and unauthorized discharges.

According to the permittee, additional acreage is available at the facility if needed. If the system is not operating in compliance with the permit and Waste Management Plan, then the permittee is responsible for finding permissible alternatives.

The Hearing Officer extended the deadline fourteen days. The comment period ended at 4:30 p.m. on Monday, September 9, 2019.

**Comment 2** Well if I knew that I was going to have five minutes, I would've maybe done some ... thinking. My name's David Mervis. I uh PO Box 247 Yellville. I live on Clabber Creek so I see water every day and I'm concerned about you know I support. Let me stop and say I support Butterball coming here. I support the jobs. I think it's great. And I'm even going to assume Butterball doesn't even want to pollute the water but my concern is no offense but the DEQ as far as the history there and being underfunded and understaffed. So assuming all of the, Scott, that's right? Assuming Scott's questions get answered, who's going to be monitoring? Is there extra staff available to monitor the water around Georges Creek and Crooked Creek? 'Cause too many times we're putting out fires after they've already started instead of being on top of things and monitoring and making sure everything's working the way it is. As Scott said you're talking about many years of effluent being put into the septic system. Which by the way, my septic system for 750 gallons is probably about thirty three thousand square feet and we're talking about one hundred thousand square feet uh this with seven thousand gallons a day, so I'm not an engineer so it's not what I'm worried about that being adequate and if it's just mud and water then maybe that's not such a big deal but lots of time you're just driving along the road picking up road dust on your cars and trucks and I don't know what's in that. And even if it's a little bit in...on your car. As that accum..., if we're talking about seven thousand gallons a day year in year out, you know maybe that's an accumulation of something that's not good in the groundwater and...it comes back to the question of I don't want to have to find that out after it's already been a disaster. I want to make sure that there's adequate funding to the DEQ to monitor that. And I also know that, that I use to believe, that the intentions of DEQ are they want clean water too. But if there're not funded properly, well Jack you can help us there, in terms of staff to monitor the water and even I'm under the impression that we're behind on the standards of what even the definition of clean water is. How much algae in the water is too much? How much E. coli or other issues in the water is too much? I

guess enough talking. I'm talking beyond Butterball, but you know there's potential issues with the DEQ that I'm concerned that, you know I keep repeating myself, that the fund...I'm concerned about the funding and I'm concerned about the staff to make sure we don't have a disaster. 'Cause and I'll close with one of the greatest things about Marion County in Arkansas is the beautiful environment and the hills and mountains and the clean water. You know if we destroy that you know well there's no incentive for anybody to move here whether it's an industry like Butterball or people that we want to retire in Marion County or people that we want to come here and start service jobs for these people and everybody wants their kids to grow up here and actually stay here because there're jobs. We don't have, if we don't have...if we lose the Buffalo River, if we lose clean water to the area then what do we have to offer? We don't have anything to offer or we have some but you know, it's a major drawing card having clean air and clean water cause so many other parts of the country don't have that. And I want to see that protected. And I guess that it unless you.....Thanks.

Commenter: David Mervis

**Response:** Water quality monitoring and development of water quality standards are activities conducted by the staff of the Planning Branch of the OWQ. The Planning Branch routinely collects and evaluates water quality data from across the state. Two ambient stations (one upstream and one downstream) are present on Crooked Creek, providing historical water quality data for Crooked Creek.

From the Truck Wash System, approximately 1,480 gallons per day of clean rinse water will enter the system from the automatic rinse, and approximately 380 gallons per day will enter the system from the manual rinse. No disinfectants associated with truck washing will enter the wastewater system.

The system is designed based on soil criteria, including but not limited to depth to bedrock, hydraulic conductivity, and loading rates. The soil criteria used to design the fields is provided in the Waste Management Plan by a Soil Certified Designated Representative. Storage practices are also designed based on the amount of wastewater being processed by the system.

All permits issued by the OWQ are self-monitoring permits. Any violations require reporting to the Enforcement Branch of the OWQ and corrective action to be taken by the facility. Condition No. 13 of Part III of the permit outlines reporting of violations and unauthorized discharges.

**Comment 3** I'm Elizabeth Vanderstek. I'm 1626 Shipps Ferry Road, Mountain Home, Arkansas. And really, I think my question has been pretty well covered. I was wondering about again the enforcement and the repercussions if pollutants in excessive of whatever the agreed about or safe limits or detected, what kind of enforcement is there and what happens? You know what happens if they start detecting it? And I think the previous speaker brought up a good point, is there

enough monitoring to ensure that a disaster doesn't happen? Do we nip in the bud more or less?

Commenter: Elizabeth Vanderstek

**Response:** All permits issued by the OWQ are self-monitoring permits. Any violations require reporting to the Enforcement Branch of the OWQ and corrective action to be taken by the facility. Condition No. 13 of Part III of the permit outlines reporting of violations and unauthorized discharges. This is a no-discharge permit, which prohibits the discharge of wastewater from the operation to waters of the State.

Water quality monitoring is an activity conducted by the staff of the Planning Branch of the OWQ. The Planning Branch routinely collects and evaluates water quality data from across the state. Two ambient stations (one upstream and one downstream) are present on Crooked Creek, providing historical water quality data for Crooked Creek.

**Comment 4** My name is Jess Vanderstek. I also live at 1626 Shipps Ferry Road. And you might ask why Baxter County people are here, but Crooked Creek water runs into the White River. And I see the White River every day. So it'll affect us. But my main concern is, and I used Ken's company when I built homes and I always thought a lot of you guys, but is there enough property for alternate B if the septic system does not...does fail. You know is there enough property to do another one like we do in the residential? I mainly built homes. But thank you.

Commenter: Jess Vanderstek

**Response:** According to the permittee, additional acreage is available at the facility if needed. If system is not operating in compliance with the permit and Waste Management Plan, then the permittee is responsible for finding permissible alternatives.

**Comment 5** My name's Edie Stahl. 950 South Fork Lane, Mountain Home, Arkansas. And I'm here with Friends of the River organization also. And I feel kind of silly because I thought maybe we get some information before we asked questions because maybe all this is going to be covered. But I have just real simple questions like what's the water demand of that monster and the people in the area, I'm sitting next to a lady that has land right adjacent to it? What will it do maybe to the well levels and the water levels? And then of course, I'm concerned about water quality issues. And I understand that chloride is supposed to bind with the soil and the septic system. What happens when it rains? Does that wash out and into the water? And is there a holding capacity for the soil and these chemicals that it's supposed to bind to? You know it's just simple questions that I'm sure there's answers to, but I share the same concerns that Scott and Beth and Jess shared also.

Commenter: Edie Stahl

**Response:** Water demand and well levels are outside the scope of this permit permitting decision.

Trenches for lateral lines are designed to have soil separation from the bottom of the trench to the true water table (aquifer) and bedrock in order for containments to attenuate and prevent the rapid migration of contaminants with groundwater. According to the boring log for the east fields from the Engineer's Report, bedrock was encountered approximately eight (8) feet below the surface. According to the boring log for the west fields from the Engineer's Report, bedrock was not encountered within the limits of the equipment which was approximately twelve (12) feet. According to the Engineer's Report, no evidence of groundwater was observed in the two soil borings, and the soil between the bottom of the trench and bedrock consisted primarily of sandy red clay, which will filter wastewater prior to reentry into the hydrologic cycle.

Soil pits for each sub-field (1 through 6) indicated that bedrock was greater than 48 inches from the bottom of the trenches, and the loading rate for each field was determined to be 0.75 gallons per day per square feet based on soil information obtained from the soil pits for each sub-field. Soils analysis and information in the Waste Management Plan was provided by a Soil Certified Designated Representative. According to the soil information gathered and presented in the Waste Management Plan, the presence of a seasonal water table was noted. Loading rates and sizing are selected by a Soil Certified Designated Representative based on the presence of a seasonal water table (brief, moderate, or long) and depth to bedrock.

Any violations of the permit such as discharging wastewater would require the permittee to take corrective action to come back into compliance with the permit.

Onsite wastewater treatment systems have different life spans, which depend on the soil present in the fields, system maintenance, and wastewater characteristics. The subsurface fluid distribution system was designed in conjunction with Professional Soil Classifiers and Professional Engineers (P.E.s) registered in the State of Arkansas in accordance with best engineering practices. The system design took in consideration loading rates recommended for the soil types, depth and duration of seasonal water table, onsite soil percolations rates, and in consideration of design guidance contained in the Arkansas Department of Health (ADH), Rules and Regulations Pertaining To Onsite Wastewater Systems. The permittee will be required to monitor parameters in the wastewater listed in Table I of Part I of the permit.

**Comment 6** Christopher Carter. I'm the Deputy Prosecutor of Marion County. PO Box 1196, Yellville, 72687. Being a lawyer, I never want to miss the opportunity to



comment. And I really agree with what Mr. Yaich's said because we really don't enough about the whole plan to comment. I also agree that enforcement and money for enforcement becomes a problem. I have been a lawyer here for 32 years and the last 16 as a prosecutor in our judicial district. We've had to prosecute various people, sometimes on behalf of ADEQ, for various problems that we have. I will tell you that most of the problems arise because citizens find out that there's the problem and it's the citizens that let people know what is going on. And that's when citizens start to find out, that's the problem that it's a little too late and unfortunately that's the world that we live in. Now, I'm all for the Butterball plant, but we are a poor county. I read in the newspaper today Marion County is 60<sup>th</sup> in this state in weekly take home pay. Arkansas is 49<sup>th</sup> out of the fifty states. You know we need the jobs, and that's vitally important. For those of you who have come here from Baxter County, y'all need to keep it in mind that you know we do not have the resources that Baxter County has, which apparently is the 40<sup>th</sup> in terms of income per capita in the state of Arkansas. Those are all balancing acts that we have, but the truth is: in enforcement of anything, the first line of defense is going to be the neighbors there and they just have to be vigilant. If there is a problem, report it. You have to report it to ADEQ because we're also a poor county and I don't have investigators or anything else. I'm the only prosecutor in the county. I just ask everybody to keep in mind and hopefully that when we have the various discussions that some of these answers or some of these questions will be answered. Thanks.

Commenter: Christopher Carter

**Response:** All permits issued by the OWQ are self-monitoring permits. The permit requires the permittee to inspect the system. Any violations require reporting by the permittee to the Enforcement Branch of the OWQ and corrective action to be taken by the facility. Complaints can be submitted to the Compliance Branch of the OWQ, and staff from the Compliance Branch of OWQ will investigate the submitted complaints.

**Comment 7** Jessie Green. White River Waterkeeper. I will just add that I would also appreciate an extension. I think that fourteen days is reasonable simply because. Well one we had requested during the application phase had requested a public hearing which would have allowed the opportunity for us to ask the questions that we have now or even you know scheduling a public hearing at the beginning of the public comment phase would have been more helpful to simply just ask questions and gain a better understanding. And so, I think that would be appreciated. And then, in addition to that it is certainly appreciated whenever I think during the format of these meetings that we have the opportunity for the question and answer, the learning phase, beforehand. It makes for a more effective comment to be given, more well informed. So that's just a comment for future reference for these. But we still very much appreciate the opportunity to comment. It's an opportunity for a public hearing in general. Thank you.

Commenter: Jessie Green

**Response:** The Hearing Officer extended the deadline fourteen days. The comment period ended at 4:30 p.m. on Monday, September 9, 2019.

Different permitting situations require differing formats for public hearings. DEQ will consider holding an informative secession prior to the comment session in future public hearings, depending on the permitting circumstances.

**Comment 8** My name is Ray Stahl. I live at 950 South Fork Lane, Mountain Home, Arkansas. Thank you for allowing me to come in at the last minute. I'm always impressed. Number one, I've been a part of Marion County for my entire professional career as a physician. Bob and Dick and Dr. Fortner and I used to work out of the hospital here, so I know many of the people here. I have as much of a love for this area, part of the world, as I do for Mountain Home. And especially like I said since I served so many beautiful things over here, I'm always concerned about the law of unintended consequences. And I think that this Butterball plant has been well thought out, well planned. I know the engineering folks, Ken Cotter and his bunch, are the finest group of engineers I know. I don't think there's any question about that. My question if I'm permitted to add a little bit further along this, is what happens from here? In other words, we have a feed mill that's going to feed turkey farms. And so my question is this, with the increased feed capacity: number one, how many facilities are now in this area that will be served by this, and number two, what is the plan, the master plan of Butterball, to be able to say how many places will there be in this service area of turkey farms? Now the pollution potential for this is I think is very, very small even though it's relatively close to the Crooked Creek. But the problem is going to be if you have not only pollution from a smell potential in that if you put it next door to a neighbor that says I don't want it in my backyard or the same thing of what happens to the turkey litter that's taken out of that facility and what happens to it. I think the thought needs to be really considered into how are the potential new facilities going to be permitted and how are they going to be monitored as far as their turkey litter and the potential that they can do. I think the environmental impact is much great from that because again Butterball doesn't invest this type of money to service just the people that they have. I can see that there are going to many, many more. I would love to know what the plans are and what ADEQ's interest is. I know what your interest is but what your potential is as far as governing and permitting that. Thank you.

Commenter: Ray Stahl

**Response:** Dry litter is under the authority of the Arkansas Natural Resources Commission (ANRC). For dry litter application in Nutrient Surplus Areas, ANRC requires the development of Nutrient Management Plans utilizing the Arkansas Phosphorus Index. The Permits Branch of the OWQ does not have authority over odor, master plans, or business models.

**Comment 9** If the wastewater system fails, is there enough land for a alternative system.

Commenter: Jess Vanderstek

**Response:** According to the permittee, additional acreage is available at the facility if needed. If system is not operating in compliance with the permit and Waste Management Plan, then the permittee is responsible for finding permissible alternatives.

**Comment 10** If pollutants in excess of allowable limits are detected in the waterways what are the repercussions?

Commenter: Elizabeth Vanderstek

**Response:** The permit is a no-discharge permit. Condition No. 5 of Part II of the permit prohibits discharge from the operation to waters of the State or onto land in any manner that may result in runoff to waters of the State or ponding on the surface of the land. Discharges from the system would be a violation and require reporting to the Enforcement Branch of the OWQ and corrective action to be taken by the facility. Condition No. 13 of Part III of the permit outlines reporting of violations and unauthorized discharges.

Water quality monitoring is an activity conducted by the staff of the Planning Branch of the OWQ. The Planning Branch routinely collects and evaluates water quality data from across the state. Two ambient stations (one upstream and one downstream) are present on Crooked Creek, providing historical water quality data for Crooked Creek.

**Comment 11** We appreciate the opportunity to provide comment on the above-referenced application for a permit to construct and operate a septic system for the wastewater generated by operation of the Butterball feed mill under construction west of Yellville. Friends of the North Fork and White Rivers, Inc. (Friends) is a member-based non-profit 501(c)(3) founded in 2002. Friends is dedicated to the maintenance of clean, healthy water in our Ozark streams, rivers, and lakes, and to the protection of the associated watersheds (Middle Section of the White River) for future generations. Our organization approaches the stewardship of our natural resources in a pragmatic, science-based fashion, recognizing the need to balance the use of our water and watersheds to support fish and wildlife populations, recreational pursuits, and jobs and the economy. Because of the proximity of the Butterball feed mill to Georges Creek, a tributary of Crooked Creek, itself a major tributary of the White River, our organization desires assurances, through the Arkansas Department of Environmental Quality's (ADEQ) administration of the state's water quality regulations that this proposed septic system will not result in pollution of Georges or Crooked creeks.

We first want to thank ADEQ for conducting the public hearing on the permit application and associated septic system in Yellville on August 22, and we appreciate the agency's willingness to extend the comment period by 14 days to allow for a more adequate review of permit application materials and to react to what all attendees heard from project engineers and Butterball environmental staff at the Yellville meeting. We believe that the ADEQ staff at the meeting clearly heard from all those making verbal comment that local and regional water quality organizations, citizens, and neighbors with land adjoining the Butterball plant were all concerned about the potential impacts of the water being treated by this proposed septic system on the well and drinking water they use in their daily lives, and on the surface waters that are so important to the recreational and economic interests of the community and region.

Commenter: Steve Blumreich, Friends of the North Fork and White Rivers

**Response:** Water quality monitoring is an activity conducted by the staff of the Planning Branch of the OWQ. The Planning Branch routinely collects and evaluates water quality data from across the state. Additional studies are conducted on a two-year, rotational basis for each eco-region. Two ambient stations (one upstream and one downstream) are present on Crooked Creek, providing historical water quality data for Crooked Creek. No monitoring stations are currently present on Georges Creek. The fields associated with the system are located downstream of Georges Creek. According to stream flow lines, the fields are between two unnamed tributaries of Crooked Creek. Therefore, the existing monitoring of Crooked Creek should indicate if any issues are occurring because of the facility's operation. The facility will also be required to annually monitor for selected parameters to determine the characteristics of the wastewater.

**Comment 12** As a related aside regarding the process used to conduct the meeting, we would like to note that the informal presentation by a project engineer and the question and answer session following the formal verbal public comments were very informative and useful. It became clear that, had that session been held *before* verbal comments were taken, many of the questions and concerns that were raised in the verbal comments would have been addressed. This likely would have reduced the number of verbal comments and most certainly would have resulted in the substance of comments being more focused and better informed by the facts. While understanding and appreciating the agency's need to ensure that public hearings provide sufficient opportunity for everyone who wishes to make public comment, for similar such future public hearings we suggest that the agency consider the option of having at least a short, informative presentation about the subject of the hearing at the beginning of the meeting. We would suggest that in all but the most controversial public hearings a two-hour meeting would still provide plenty of time for everyone who wished to make comment.

Coming into the meeting, our primary concerns were focused on: (1) the chemical composition of the wastewater that would be discharged into the septic system;

(2) the possibility and extent of any pollutants contained in the wastewater traveling downward through the soil; and (3) the possibility of such pollutants negatively impacting the chemical and biological composition of nearby flowing surface waters via groundwater contamination. These issues are our continuing concerns about all projects as large and potentially impactful for watersheds such as Georges and Crooked creeks.

Commenter: Steve Blumreich, Friends of the North Fork and White Rivers

**Response:** Different permitting situations require differing formats for public hearings. DEQ is considering holding informative secession prior to the comment session in future public hearings, depending on the permitting circumstances.

**Comment 13** However, most of the questions raised in our verbal comments and our most immediate concerns were largely adequately addressed by the presentation and Q&A session that followed the verbal comment period at the public meeting. Our understanding is that the water entering the septic system will only contain water used to wash the exterior of the trucks and will *not* contain any water used to disinfect trucks or any other component of plant operations. This is a critical point inasmuch as our initial concerns centered on the potential of pollutants to make their way through infiltration and subsurface flow beneath the septic system to shallow groundwater flows entering Georges Creek and subsequently Crooked Creek. This concern is both significant and legitimate given the karst geology of the region. But, if indeed the wash water contains no pollutants in concentrations sufficient to impact the quality of groundwater or adjoining surface waters in either the short-term or cumulatively over the life of the system's operation, that concern would be minimized. However, while the total dissolved solids in the wash water would clearly be intercepted by the septic system, the potential cumulative impact of the chlorides and sulfates over decades of operation would be a remaining concern.

Commenter: Steve Blumreich, Friends of the North Fork and White Rivers

**Response:** Trenches for lateral lines are designed to have soil separation from the bottom of the trench to the true water table (aquifer) and bedrock in order for containments to attenuate and prevent the rapid migration of contaminants with groundwater. According to the boring log for the east fields from the Engineer's Report, bedrock was encountered approximately eight (8) feet below the surface. According to the boring log for the west fields from the Engineer's Report, bedrock was not encountered within the limits of the equipment which was approximately twelve (12) feet. According to the Engineer's Report, no evidence of groundwater was observed in the two soil borings, and the soil between the bottom of the trench and bedrock consisted primarily of sandy red clay, which will filter wastewater prior to reentry into the hydrologic cycle.

Soil pits for each sub-field (1 through 6) indicated that bedrock was greater than 48 inches from the bottom of the trenches, and the loading rate for each field was determined to be 0.75 gallons per day per square feet based on soil information obtained from the soil pits for each sub-field. Soils analysis and information in the Waste Management Plan was provided by a Soil Certified Designated Representative. According to the soil information gathered and presented in the Waste Management Plan, the presence of a seasonal water table was noted. Loading rates and sizing are selected by a Soil Certified Designated Representative based on the presence of a seasonal water table (brief, moderate, or long) and depth to bedrock.

Any violations of the permit would require the permittee to take corrective action to come back into compliance with the permit. The system will dispose of wastewater by subsurface infiltration into the soils.

Onsite wastewater treatment systems have different life spans, which depend on the soil present in the fields, system maintenance, and wastewater characteristics. The subsurface fluid distribution system was designed in conjunction with Professional Soil Classifiers and Professional Engineers (P.E.s) registered in the State of Arkansas in accordance with best engineering practices. The system design took in consideration loading rates recommended for the soil types, depth and duration of seasonal water table, onsite soil percolations rates, and in consideration of design guidance contained in the Arkansas Department of Health (ADH), Rules and Regulations Pertaining To Onsite Wastewater Systems. The permittee will be required to monitor parameters in the wastewater listed in Table I of Part I of the permit..

**Comment 14** Another concern we had was with respect to whether there were options available for a “Plan B” in the event of failure of the system as designed to meet all regulatory requirements and related water quality standards. We were pleased to learn at the meeting that in the perhaps unlikely event of system failure, there is nevertheless sufficient land area available for an alternate system to be developed. However, we would like to know which qualified government agency or engineering firm will make the inspections during the construction of this large septic system? Is anyone required to be bonded for deficient design or construction of the proposed waste system? What is the dollar amount of the bond?

Commenter: Steve Blumreich, Friends of the North Fork and White Rivers

**Response:** Condition No. 3 of Part II of permit requires that the project engineer submit two notifications to the OWQ. The first notification must be submitted 24 hours before the start of construction. The second notification must be within 24 hours of completion. Operations shall not commence until the permittee has obtained written approval from the OWQ. Condition No. 2 of Part II of the permit requires that the waste management system be constructed and operated in

accordance with the approved Waste Management Plan. The Waste Management Plan and construction plans were developed by Consolidated Land Services, Inc. under the supervision of professional engineer licensed in the State of Arkansas. The DEQ does not require financial assurance for these types of permits.

**Comment 15** Finally, but importantly, we would like to request that ADEQ establish a water quality monitoring station on Georges Creek downgrade of the Butterball plant. We understand that the agency's resources for routine monitoring are somewhat limited, and that a great many of Arkansas's Ozark streams are not monitored. However, given the nature of subsurface water movement in the karst geology of the region, and the size and projected length of operation of the Butterball plant, we believe it justifiable in light of ADEQ's water quality responsibilities on behalf of the citizens and environment of Arkansas to invest in a monitoring station at this location.

We would further request that ADEQ do the initial sampling required to establish the current baseline for water quality parameters in advance of the initiation of plant operations. Thus, in light of the Butterball representative's statement at the meeting that operations could begin before the end of the calendar year, we request that baseline sampling take place within the next 60 days.

Commenter: Steve Blumreich, Friends of the North Fork and White Rivers

**Response:** Water quality monitoring is an activity conducted by the staff of the Planning Branch of the OWQ. The Planning Branch routinely collects and evaluates water quality data from across the state. Additional studies are conducted on a two-year, rotational basis for each eco-region. Two ambient stations (one upstream and one downstream) are present on Crooked Creek, providing historical water quality data for Crooked Creek. No monitoring stations are currently present on Georges Creek. The fields associated with the system are located downstream of Georges Creek. According to stream flow lines, the fields are between two unnamed tributaries of Crooked Creek. Therefore, the existing monitoring of Crooked Creek should indicate if any issues are occurring because of the facility's operation. The facility will also be required to monitor for selected parameters on an annual basis to determine the characteristics of the wastewater.

**Comment 16** Division of Environmental Quality (DEQ) staff noted that the "*The site investigation and geotechnical report will also need to demonstrate the type of soil located at the proposed site and that adequate separation exists from bedrock.*" The applicant's response did not sufficiently address DEQ comments and concerns. The 7 August 2017 geotechnical report provided by Anderson Engineering Consultants, Inc. noted inaccessible boring locations and stated "*The inaccessible borings will be completed once the locations become accessible. An addendum to this report will be issued upon completion of the remaining borings.*" Addendum has not been provided. Furthermore, Plate 37 notes

“Proposed Fields” and “Field Digs by CLS 5/29/2019;” however, no certified geotechnical information are provided with these notes. The assumed stratigraphy should have been revised after new data was gathered.

Commenter: Jessie Green

**Response:** The geotechnical report provided by Anderson Engineering Consultants, Inc. was for determining the location of the building structures. Excerpts of the report were provided to supplement the record. Separate soil borings were conducted near the location of fields to provide information at the actual location of the fields. The Engineer’s Report regarding these soil borings was submitted to the OWQ on July 5, 2019.

According to the boring log for the east fields from the Engineer’s Report, bedrock was encountered approximately eight (8) feet below the surface. According to the boring log for the west fields from the Engineer’s Report, bedrock was not encountered within the limits of the equipment which was approximately twelve (12) feet.

**Comment 17** Part I, Specific Conditions #8 & 9 outline inspection and maintenance activities, as well as for recordkeeping requirements in accordance with general permitting requirements for subsurface wastewater disposal permits. This information should be submitted to DEQ annually and made available with other relevant permit information associated with 5329-W via the online Permit Database System (PDS).

During the informal question and answer session of the public hearing, a nearby landowner commented she has noticed increased turbidity in the spring on her property that is used to water her cattle since construction began at the feed mill. Given the high likelihood of a hydrological connection between shallow groundwater on-site at the feed mill to significant water sources for nearby landowners, readily available annual reports are warranted.

Commenter: Jessie Green

**Response:** The permittee must comply with Condition Nos. 8 and 9 of Part II of the permit to inspect the system annually and maintain records regarding any removal of materials. Records associated with Condition Nos. 8 and 9 of Part II of the permit must be maintained on site and made available to DEQ personal on request as is the required by all permittees issued an individual permit for septic tank and subsurface fluid distribution systems. According to the Engineer’s Report, no evidence of groundwater was noted in the either of the soil borings conducted at the west and east field locations.

**Comment 18** General information required by the applicant includes notification of any changes in waste composition. Combined Wastewater Characteristics provided by



the applicant are based on “results of a sampling and analysis that was performed on the water supply well for the facility.” Provided wastewater characteristics simply denote background source water characteristics limited to a narrow set of parameters. However, wastewater generated from the truck wash system and tank farm containment makes it likely that wastewater will inevitably include trace metals and other non-metal constituents. Animal feed is often contaminated with heavy metals, thereby increasing the necessity for monitoring and reporting of wastewater effluent, at least on a quarterly basis until a baseline has been established for the site-specific effluent.

At minimum, monitoring and reporting should include the following parameters: aluminum (Al), arsenic (As), beryllium (Be), boron (B), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), lithium (Li), mercury (Hg), manganese (Mn), molybdenum (Mo), nickel (Ni), selenium (Se), thallium (Tl), vanadium (V), and zinc (Zn).

Commenter: Jessie Green

**Response:** Part I of the Permit has been revised to list limitations and monitoring requirements. Part I of the draft permit is now Part II of the final permit.

The selected monitoring parameters are based off of applicable parameters (metals, oil and grease, and pH) required for the land application of industrial waste, and in consideration of “Toxic Substances” potentially present and which have water quality criteria published in APC&EC Reg. 2.508, as well as the parameters listed of concern in the Waste Management Plan. Parameters are required to be reported annually to the OWQ in accordance with Condition No. 11 of Part II of the permit. See Statement of Basis No. 9 for justification of monitoring frequency and the selected parameters.

**Comment 19** Please find the attached revised sheet 17074-PRMT1.1 for the above Waste Management Plan & Permit Application. The revision is to change the treatment tank to Xerxes, an approved manufacturer on the Arkansas Department of Health Authorized Products List. The size of the proposed tank requires it be custom built and the lead time for delivery from the two manufacturers differs significantly. The two proposed tanks are technically the same for capacity and dimensions. We understand this will not affect the scheduled public comment process.

**Response:** DEQ acknowledges the revision of the Waste Management Plan to change the tank manufacturer.

**DEQ Comment:** DEQ revised Statement of Basis No. 7 to remove language from the tank farm containment section regarding the estimated wastewater per day since the wastewater is generated per use instead of daily.

**Summary of Changes to the permit**

Part	Draft Permit	Final Permit	Comment #																														
Part I	*	<p><b>Part I</b>  <b>PERMIT REQUIREMENTS</b>  <b>LIMITATIONS AND MONITORING REQUIREMENTS:</b>  <i>The following table details the constituent limits, monitoring frequencies, and the requirements for reporting results to ADEQ for each respective parameter listed in the table heading. Samples shall be representative of the combined wastewater distributed from the septic tank to the subsurface fluid distribution fields.</i></p> <table border="1"> <thead> <tr> <th colspan="4">Table 1</th> </tr> <tr> <th colspan="4">Waste Analysis</th> </tr> <tr> <th>Parameter</th> <th>Maximum Limit</th> <th>Reporting Unit</th> <th>Monitoring Frequency</th> </tr> </thead> <tbody> <tr> <td>Total Dissolved Solids</td> <td rowspan="15">Report</td> <td rowspan="15">mg/l</td> <td rowspan="15">Annually</td> </tr> <tr> <td>Chlorides</td> </tr> <tr> <td>Sulfates</td> </tr> <tr> <td>Oil and Grease</td> </tr> <tr> <td>pH</td> </tr> <tr> <td>Arsenic</td> </tr> <tr> <td>Cadmium</td> </tr> <tr> <td>Copper</td> </tr> <tr> <td>Chromium (total)</td> </tr> <tr> <td>Lead</td> </tr> <tr> <td>Mercury</td> </tr> <tr> <td>Molybdenum</td> </tr> <tr> <td>Nickel</td> </tr> <tr> <td>Selenium</td> </tr> <tr> <td>Zinc</td> </tr> </tbody> </table>	Table 1				Waste Analysis				Parameter	Maximum Limit	Reporting Unit	Monitoring Frequency	Total Dissolved Solids	Report	mg/l	Annually	Chlorides	Sulfates	Oil and Grease	pH	Arsenic	Cadmium	Copper	Chromium (total)	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc	Comment 18
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Part II	Part I Specific Conditions	Part II Specific Conditions	Comment 18																														
Part II Condition No. 11	*	<p><i>Wastes analyses required by Part I of the Permit are due by the May 1st of each year for the previous permitted months of January to December (i.e. Waste Analysis is due on May 1, 2020, for the 2019 calendar year). Waste analysis for the 2019 operating year may be waived upon request to DEQ if the facility is not fully constructed or operational.</i></p>	Comment 18																														
Part III	Part II Standard Conditions	Part III Standard Conditions	Comment 18																														
Part IV	Part III Definitions	Part IV Definitions	Comment 18																														

<b>Summary of Changes to the permit</b>			
Part	Draft Permit	Final Permit	Comment #
Statement of Basis No. 9	*	<p><u>Part I Permit Requirements</u></p> <p>i. <u>Monitoring Frequency</u>  <i>The monitoring frequency of once annually is to ensure that a sample of what is entering the system is measured and recorded for future reference. Changes to monitoring requirements or frequency may be requested by the permittee at the next renewal. The Department will consider the request based on data, renewal material, and facts available at that time.</i></p> <p>ii. <u>Waste Monitoring and Reporting Requirements</u></p> <p>a. <u>Reporting requirements for Total Dissolved Solids (TDS), Chlorides, and Sulfates in the wastewater</u>  <i>The wastewater contains TDS, chlorides, and sulfides. Reporting of these parameters will aid in determining if any changes noted in surface waters may be related to operation of the facility.</i></p> <p>b. <u>Reporting requirements for Oil and Grease in the wastewater</u>  <i>The wastewater may contain levels of oil and grease. Excessive levels could become a source of pollutants in groundwater.</i></p> <p>c. <u>Reporting requirements for pH of the wastewater</u>  <i>The pH of the wastewater must be reported to ensure that it will not negatively impact the pH of the soil.</i></p> <p>d. <u>Reporting requirements for arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc in the wastewater</u>  <i>The wastewater may contain levels of these metals. Soil particles and interaction with organic compounds may control the mobility of these metals. Monitoring of these is needed to determine the potential of accumulation of metals in the soil to concentrations that could have adverse effects on the environment.</i></p>	Comment 18
Statement of Basis No. 9	Part I Special Conditions	Part II Special Conditions	Comment 18
Statement of Basis No. 9	Part II Standard Conditions	Part III Standard Conditions	Comment 18

<b>Summary of Changes to the permit</b>			
Part	Draft Permit	Final Permit	Comment #
Statement of Basis No. 9	*	<p><u>Requirements for annual reporting of waste analysis</u></p> <p><i>This condition is required to ensure that the permittee is monitoring the parameters listed in Part I of the permit for future reference. Changes to monitoring requirements or frequency may be requested by the permittee at the next renewal. The Department will consider the request based on data, renewal material, and facts available at that time.</i></p>	Comment 18
Statement of Basis No. 9	<p><u>Part III- Definitions</u></p> <p>All definitions in Part III of the permit are self-explanatory.</p>	<p><u>Part IV- Definitions</u></p> <p>All definitions in Part IV of the permit are self-explanatory.</p>	Comment 18
Statement of Basis No. 7	<p><u>Tank Farm Containment</u></p> <p>Storage tank exterior walls and the containment area without chemical additives will be periodically washed. Minor traces of feed mill dust, animal fat, and vegetable oil may be present in this wash water. A sump pit manual valve will be opened to drain the wash water by gravity flow to the wastewater system. Washing the storage tank exterior walls and the containment area is estimated to generate approximately 1 gallon per day or less than 300 gallons per use.</p>	<p><u>Tank Farm Containment</u></p> <p>Storage tank exterior walls and the containment area without chemical additives will be periodically washed. Minor traces of feed mill dust, animal fat, and vegetable oil may be present in this wash water. A sump pit manual valve will be opened to drain the wash water by gravity flow to the wastewater system. Washing the storage tank exterior walls and the containment area is estimated to generate less than 300 gallons per use.</p>	DEQ Comment