

Liquid Animal Waste Management Systems Rule

Applicability: The provisions of this rule are applicable to the operation of swine, poultry, or dairy farms or other confined animal operations using liquid animal waste management systems. This rule is not applicable to commercial waste hauling or commercial land applications companies.

Exemption: Any confined animal operation using a liquid waste management system shall be exempt from the requirements of this rule if the owner or operator obtains and maintains coverage under a National Pollutant Discharge Elimination System permit for discharges from the confined animal operation.

I. Definitions:

1. “Best Management Practices” means schedules of activities, prohibited activities, maintenance procedures and management practices that prevent or reduce pollution of the waters of the state, as set forth in this rule and the permit.
2. “Concentrated animal feeding operation (CAFO)” means an animal feeding operation that is defined as a Large CAFO or as a Medium CAFO pursuant to 40 CFR 122.23, or that is designated as a CAFO in accordance with 40 CFR 122.23(c).
3. “Confined Animal Operation” means any lot or facility where livestock, fowl, or other animals have been, are, or will be stabled or confined and fed or maintained, and where crops, vegetation, forage growth or post-harvest residues are not sustained in the normal growing season over significant portions of the lot or facility.
4. “Department” means the Arkansas Department of Agriculture.
5. “Permit” means an authorization conferred by the Department pursuant to Ark. Code § 15-20-102.
6. “Liquid Animal Waste Management System” means any system used for the collection, storage, or distribution of animal manure in liquid form generated by a confined animal operation.
7. “Ordinary High-Water Mark” means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as cleat, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
8. “Reasonably Anticipated” means greater than a 50% chance of precipitation of 0.25 inches or more on the zone area forecast for the county that represents the land application site using the National Weather Service station website: www.weather.gov.
9. “Site Management Plan” means a plan prepared by the United States Department of Agriculture Natural Resource Conservation Service, a Certified Nutrient Management Planner, or a Professional Engineer registered in the state of Arkansas which includes a detailed map of the land application site showing all buffer zones, a description of the land use and the crops grown on the site, and a land use agreement if the site is not owned by the permittee.
10. “Nutrient Management Plan” means a plan prepared in accordance with Ark. Code § 15-20-1107 by a Certified Nutrient Management Planner or a Professional Engineer registered in the state of Arkansas, detailing the management of liquid manures generated in a confined animal operation.
11. “Waters of the state” means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of surface and underground water, regardless of whether natural or artificial or public or private, which are contained within, flow through, or border upon this state or any portion of this state as defined by the Arkansas Water and Air Pollution Control Act, Ark. Code §§ 8-4-101 et seq.

II. Permits, Applications, and Procedures

1. Requirements for a Permit. No confined animal operation using a liquid animal waste management system shall be constructed or operated unless the owner has first obtained a permit from the Department.
2. Permitting Authority. The Department shall issue permits in accordance with Ark. Code § 15-20-102.
3. Permit Application Process and Notice
 - a. An applicant shall file a permit application on forms made available by the Department. The Department will not process incomplete applications.
 - b. The Department shall provide public notice on the Department website of the following:
 - (i). Permit applications;
 - (ii). Draft permitting decisions; and
 - (iii). Final permitting decisions
 - c. Public comments on draft permit decisions will be accepted beginning on the day the notice of the draft permit decision is posted, until thirty (30) calendar days after the notice.
 - d. Public hearings on draft permit decisions may be conducted at the discretion of the Department.
 - e. A permitting decision will be completed after the thirty (30) day public notice period.
4. Permit Modification
 - a. Causes for modification. Causes for permit modification include but are not limited to:
 - (i). Volume Increase. A greater than ten percent increase in the volume of liquid animal waste, as excreted, generated by the facility over what was allowed by the original permit or the last major modification for an increase in volume; or
 - (ii). Addition of land application sites.
 - b. When a permit is modified, only the conditions subject to modification are reopened.
 - c. Permit modifications must be prepared in accordance with section II.3. above.
5. Minor Modifications of Permits.
 - a. Upon receipt of written consent by the permittee, the Department may modify a permit to make the changes listed in this section. Such changes will be deemed a minor modification to the permit.
 - b. Modifications allowed under this section may be made administratively in compliance with this rule. Any modification not made under this section shall be deemed a major modification and must follow the permitting requirements described in section II.3. above.
 - c. Minor modifications may only:
 - (i). Correct typographical errors;
 - (ii). Allow for a change in ownership or operational control of a facility (transfer of the permit) where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department;
 - (iii). Transfer permitted land application sites to another permit for the same manure source;
 - (iv). Allow for the addition of sites associated with a less than ten percent increase in volume of manure as excreted to provide more land to lower nutrient loadings;
 - (v). Remove land application sites from a permit;
 - (vi). Changes or practices not associated with a significant increase in storage volume; or
 - d. A minor modification does not require public notice.
6. Permit Transfer. An applicant requesting the transfer of a permit shall submit to the Department a written request for transfer of the permit on a form made available by the Department.
7. Permit Fee. A permit fee, as established by the Arkansas Livestock and Poultry Division, shall be

required for each permit as described below.

- a. Application Fee \$200
- b. Annual Fee..... \$200
- c. Modification Fee..... \$200

III. Technical Requirements

1. Approval of Design. No liquid animal waste management system shall be constructed, modified, or placed into operation unless in accordance with final design plans and specifications approved by the Department.
2. Design Requirements and Guidance. Designs and nutrient management plans shall be in accordance with this rule, the Arkansas Phosphorus Index, and guidance as applicable from the following United States Department of Agriculture Natural Resource Conservation Service technical publications:
 - a. Field Office Technical Guide, as amended; and
 - b. Agricultural Waste Management Field Handbook, as amended.

3. Siting Requirements

- a. Confinement buildings, settling basins, holding ponds, and other liquid animal waste manure containment structures shall not be constructed within 1,320 feet of the nearest occupied dwelling for confined animal operations. This requirement only applies to animal feeding operations which exceed the following number of animals:
 - i. 600 beef cattle,
 - ii. 430 dairy cows,
 - iii. 1,500 finishing hogs,
 - iv. 600 sows,
 - v. 6,000 nursery pigs,
 - vi. 33,000 turkeys, or
 - vii. 130,000 chickens.
- b. A buffer distance of 500 feet shall apply to all other facilities.
- c. These buffer distances shall not apply if the existing occupied residence or dwelling is owned by owners or operators of the liquid manure management system or if the adjoining property owner consents in writing.
- d. Confined animal operations existing as of 1992 and proposing to construct a liquid manure containment structure to reduce run-off to waters of the State may be considered exempt from these buffer distances.
- e. These buffer distances do not apply to confinement buildings, settling basins, holding ponds or other liquid animal waste containment structures existing as of the effective date of this rule, nor do they apply to existing structures when a Liquid Animal Waste permit modification is required due to a change in ownership.

4. Subsurface Investigation Requirements. The subsurface investigation for earthen holding ponds and treatment lagoons suitability and liner requirements may consist of auger holes, dozer pits, or backhoe pits that should extend to at least two (2) feet below the planned bottom of the excavation. In those situations where this depth is not practical in the initial on-site subsurface investigation, the applicant shall provide additional subsurface investigation documentation to the Department.

5. Nutrient Management Plan

- a. All permitted facilities must have a nutrient management plan, and a site management plan if applicable. The nutrient management plan shall be developed in accordance with Section III.2. above, and shall address the timing of land application of nutrients with respect to the nutrient uptake cycle of the vegetation found on the land application site(s) and, to the extent practicable, shall include measures to minimize off-site obnoxious and offensive odors.

- b. In Nutrient Surplus Areas designated by Ark. Code § 15-20-1104, persons drafting nutrient management plans must be certified in accordance with Ark. Code § 15-20-1106 and Arkansas Department of Agriculture's Natural Resources Commission Title 20, "Rules Governing the Arkansas Nutrient Management Planner Certification Program."
- c. A Nutrient Management Plan shall contain sufficient documentation to demonstrate that manure and associated nutrients will be managed in compliance with these rules and with the expectation that proper management of those nutrients will be protective of the waters within the state.
- d. The Department shall require proof of land ownership or of contractual agreements for use of the land as a land application site.
- e. The facility nutrient management plan shall be reviewed annually by the operator. An updated nutrient management plan shall be submitted to the Department when significant changes are made or as required by the Department. The updated nutrient management plan shall include soil samples and analysis as required by this rule.
- f. The nutrient management plan must be updated by the operator every five (5) years.
- g. The operator shall determine that the land application sites proposed for the nutrient management plan are not currently permitted by the Department, the Division of Environmental Quality, or used by another user.

6. Land Application Requirements

- a. Manure applications shall be evenly distributed over application sites at the rates specified in nutrient management plans.
- b. Land application of manure shall not be undertaken when soil is saturated, frozen, covered with ice or snow, or when significant precipitation is reasonably anticipated in the next twenty-four hours.
- c. Manures shall not be applied on slopes with a grade of more than fifteen percent (15%) or in any manner that will allow the manure to enter waters of the State or to run onto adjacent property without the written consent of the affected adjacent property owner. An exception to the slope requirement will be permitted if:
 - (i). Manure is incorporated into the soil; and
 - (ii). Additional Best Management Practices are applied to the Arkansas Phosphorus Index so that manures do not exit application areas.
- d. Application of manures shall not be made within 100 feet of streams including intermittent streams, ponds, lakes, springs, sinkholes, rock outcrops, wells, and water supplies; or 300 feet of extraordinary resource waters as defined by the Arkansas Pollution Control and Ecology Commission Regulation No. 2. Buffer distances for streams, ponds and lakes shall be measured from the ordinary high-water mark. The Department may require additional buffer distances deemed necessary to protect the waters of the state.
- e. Application of manures shall not be made within 50 feet of property lines or 500 feet of neighboring occupied buildings existing as of the date of the permit. The restrictions regarding property lines or neighboring occupied buildings shall not apply if the adjoining property is also approved as a land application site under a permit issued by the Department or if the adjoining property owner consents in writing.
- f. Application of manures shall not be made in areas where the land application of Liquid Animal Waste is prohibited by Arkansas Department of Health regulations for the protection of public water supplies.

7. Recordkeeping Requirements

- a. Records shall be kept of all nutrients applied. These records shall be kept in sufficient detail to determine the application rate. A daily log shall be kept of all land applied waste manures and other nutrients/wastewater when applying. The log should include date, weight and/or volume, field identification and the acreage over which the manures and nutrient sources waste/wastewater was spread applied. All records and logs shall be kept at the facility and

- provided to the Department upon request.
- b. A representative sample of the Liquid Animal Waste to be land applied shall be collected periodically, at a minimum of once each year, and analyzed for the following parameters: pH, Total Nitrogen, Potassium, Total Phosphorus, Soluble Phosphorus, and percent solids.
 - c. The soils of each field where liquid manure has been land applied shall be sampled and analyzed at least once every five (5) years in accordance with the Nutrient Management Plan.
 - d. Annual reports for the previous calendar year shall be submitted prior to May 30th of each year on forms made available by the Department, and must include the following:
 - (i). manure waste/wastewater analyses conducted under this rule;
 - (ii). locations, volumes, and nitrogen application rates for the previous year; and
 - (iii). methods of application; and types of crops grown on each land application site.

IV. Facility Construction Certification

- 1. The provisions of this rule require all confined animal operations to be constructed in accordance with plans and specifications approved by the Department.
- 2. Following completion of construction and prior to any operation commencing at the facility, certification that the facility was constructed in accordance with the approved plans and specifications must be submitted to the Department.
- 3. This certification must be prepared the by United States Department of Agriculture Natural Resource Conservation Service, a certified water quality technician, the University of Arkansas Cooperative Extension Service, or a Professional Engineer registered in the State of Arkansas.
- 4. Authorization to operate the facility will not be issued until the certification is received and reviewed by the Department.

V. Alternative Permitting and Waste Management

- 1. Permit for Land Application Site Only.
 - a. A separate permit may be issued for a land application site if the operator submits an application which includes a site management plan for the land application site and a plan detailing:
 - (i). nutrient application rates;
 - (ii). the timing of Liquid Animal Waste application with respect to the nutrient uptake cycle of the vegetation found on the land application site(s); and
 - (iii). manure storage and distribution method(s) prepared in accordance with the requirements of this rule.
 - b. The applicant for such a permit shall notify the Department of any contractual agreement for the use of the land as a land application site by submitting a copy of the agreement.
 - c. Records of manure application shall be kept as specified in this rule and shall include information regarding the source of the nutrient, including location and permit number if applicable.
 - d. Sampling, analysis, and annual reporting as specified in this rule are required.
- 2. Composting
 - a. Nutrient management plans submitted in accordance with this rule may include composting as an alternative to land application of Liquid Animal Manure in accordance with a permit issued by the Division of Environmental Quality pursuant to Arkansas Pollution Control and Ecology Commission Rule 22.
 - b. Any such plans may provide for composting at a Division of Environmental Quality-permitted composting facility.
 - c. If no such facility is referenced in the plan, it must include sufficient detail for a determination

by the Department that point or nonpoint source pollution to the waters of the State will not result from the use of this alternative.

VI. Facility Closure Plan Required

1. Should a permitted confined animal operation using a liquid manure management system cease operation, the permittee shall submit to the Department a closure plan for the liquid manure system storage/treatment structure(s) within sixty (60) days of the final day of operation for Department review and approval.
2. Within ten (10) days of completion of closure activities, the permittee must submit certification that the facility was closed in accordance with the approved plan.
3. The closure plan and closure certification shall be prepared by the United States Department of Agriculture Natural Resource Conservation Service, a certified nutrient management planner, the University of Arkansas Cooperative Extension Service, or a Professional Engineer registered in the State of Arkansas.

VII. Watershed Specific Rules

1. "Buffalo National River Watershed" means the area within United States Geologic Service Hydrologic Unit Code 11010005.
2. The Department shall not issue a permit pursuant to this rule for a new swine Confined Animal Operation in the Buffalo National River Watershed.
3. This rule does not prohibit the Department from issuing a permit renewal or modification for a Confined Animal Operation in the Buffalo National River Watershed with an active permit as of the effective date of this rule; or
4. A permit renewal or permit modification issued pursuant to this subsection shall not increase the number of swine permitted at a facility.

VIII. Prohibitions. The operator of a confined animal operation constructed and operated as authorized by permit in accordance with the provisions of this rule shall not allow or cause a point source discharge from any part of the liquid animal manure management system.

IX. Administrative Procedures

1. Administrative Procedures. Hearings, notice, and adjudicative proceedings under this rule will be in accordance with the Arkansas Administrative Procedures Act, Ark. Code §§ 25-15-201 et seq.
2. Penalty Policy. For any violation, the Department may impose an administrative penalty not to exceed \$5,000.00.
3. Severability. If any provision of this rule or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this rule which can be given effect with the invalid provision or application, and, to this end, provisions of this rule are declared to be severable.