

Arkansas Natural Resources Commission
Rules Governing the Arkansas Soil Nutrient and Poultry Litter
Application and Management Program
Title 22
(effective January 1, 2010)

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Subtitle I. General provisions

Section 2201.1 Purpose.

The Arkansas Natural Resources Commission developed this Title to encourage prudent practices regarding the application and management of soil nutrients and poultry litter to protect and enhance the state's surface water quality while allowing for optimum soil fertility and proper plant growth. The primary goal of this Title is to maintain the benefits derived from the wise use of poultry litter, commercial fertilizers, and other soil nutrients while avoiding unwanted effects from excess nutrient applications on the waters within the State. In furtherance of this goal, these Rules provide requirements applicable to nutrient surplus areas, nutrient management plans, and poultry litter management plans. These rules are designed to protect the waters within the state from adverse effects of excess nutrients while allowing for maximum soil fertility and proper plant growth.

Section 2201.2 Enabling and pertinent legislation.

A. Arkansas Code Annotated § 8-4-101 et seq., "Arkansas Water and Air Pollution Control Act."

B. Ark. Code Ann. § 15-20-201 et seq., "Arkansas Natural Resources Commission."

C. Ark. Code Ann. § 15-20-901 et seq., "Arkansas Poultry Feeding Operations Registration Act."

D. Ark. Code Ann. § 15-20-1001 et seq., "Arkansas Soil Nutrient Management Planner and Applicator Certification Act."

E. Ark. Code Ann. § 15-20-1101 et seq., "Arkansas Soil Nutrient Application and Poultry Litter Utilization Act."

F. Ark. Code Ann. § 25-15-201 et seq., "Arkansas Administrative Procedure Act."

Section 2201.3 Powers of the Commission.

A. The Arkansas Natural Resources Commission is authorized to develop all regulations necessary to implement the Arkansas Soil Nutrient Application and Poultry Litter Utilization Act, taking into consideration the following factors:

1. The current and projected level of nutrients in the soil within the area;
2. The current or potential impacts of surplus nutrients within the area;
3. Litter produced and applied in the area;
4. Commercial fertilizer, compost and other sources of nutrients applied within the area;
5. The current or projected Nutrient needs within the area, including the nutrient level necessary to maintain soil fertility, current and future cropping patterns, and those crops' demand for nutrients;

6. The soil type, geology, hydrology and other physical characteristics of the area;
and

7. The types of water bodies and the uses of the waters within the area.

B. When developing regulations necessary to implement this program, the Commission may also consider the culture of the affected areas including the traditions, the way people have lived, worked their land, and earned their livelihood.

C. The Commission may delegate portions of the program developed hereunder for implementation to the Executive Director, to conservation districts designated by the Commission, or both.

Section 2201.4 Definitions.

As used in this Title, the following terms shall have the definitions below unless otherwise specifically stated herein.

A. "Administrative consent order" means a legal agreement signed by the Director and a violator of this title through which the violator agrees to pay a fine, take a required corrective action, refrain from an activity, or a combination of the listed actions. It describes the actions to be taken by all signatories and may be enforced in court.

B. "Arkansas Phosphorus Index" means the risk-based assessment tool referenced in nutrient management plans developed to govern the terms and conditions under which nutrients may be land-applied. See P. A. Moore, A. N. Sharpley, W. Delp, B. Haggard, T. Daniel, K. VanDevender, A. Baber, and M. Daniels; *The Revised Phosphorus Index* (2009).

1. Any nutrient management plan drafted or revised pursuant to the Arkansas Phosphorus Index effective at the time of its drafting or revision will not be deemed out of compliance for failure to use the current index until five years have passed since the plan was drafted or revised.

2. However, any updates to that nutrient management plan within that five-year period must be conducted in a compliance with the index effective at the time of update.

C. "Certified nutrient applicator" may refer to either a certified commercial applicator or a certified private applicator and means a person who has been certified by the Commission as competent to apply nutrients to land pursuant to Rules Governing the Arkansas Nutrient Management Applicator Certification Program, Title XXI.

D. "Certified nutrient planner" means a person who has been certified by the Commission as competent to develop nutrient management plans pursuant to Rules Governing the Arkansas Nutrient Management Planner Certification Program, Title XX.

E. "Commission" means the Arkansas Natural Resources Commission.

F. "Compost" means a process which biologically stabilizes livestock and poultry mortalities, making them suitable for disposal by land application. The process uses a simple mixture of dry poultry manure (litter), carcasses, and a bulking agent or aeration medium such as hay or straw. Only enough water is added to keep the material moist and the mixture should never be saturated. Compost does not include composted plant material with no animal carcasses or manure added that is used as a soil amendment and not principally for its nutrient value.

G. "Conservation district" means a conservation district created under the Conservation Districts Law, Ark. Code Ann. §14-125-101 et seq.

H. "Crop" means any managed vegetative cover.

I. “Director” means the Executive Director of the Arkansas Natural Resources Commission.

J. “Land application” means the spreading on or incorporation of litter into the soil mantle primarily for beneficial purposes.

K. “Litter” means byproducts associated with the confinement of livestock, including excrement, feed wastes, bedding materials, composted carcasses, and any other combinations thereof.

L. “Livestock” means animals kept or raised for use or pleasure, especially farm animals kept for use and profit, including horses, cattle, swine, and poultry.

M. “Nutrient” means a substance or recognized plant nutrient, element or compound that is used or sold for its plant nutritive content or its claimed nutritive value including, without limitation, substances in litter, compost as fertilizer, commercially manufactured chemical and organic fertilizers, sewage sludge and combinations thereof.

N. “Nutrient Application” means the process by which persons apply nutrients to soil or associated crops.

O. “Nutrient applicator” means any person who applies nutrients to soil or associated crops.

P. “Nutrient management plan” means a documented record of how nutrients will be managed on a nutrient management unit and is prepared in accordance with United States Department of Agriculture Natural Resources Conservation Service conservation practice standards for Arkansas to guide and assist landowners and operators in the use of fertilizers, litter, sewage sludges, compost and other nutrient sources for soil fertility and protection of the waters within the state.

Q. “Nutrient management unit” means the field, group of fields, or other land units, that collectively include all land area on which nutrients will or may be applied and managed pursuant to a nutrient management plan.

R. “Nutrient surplus area” means a defined geographic area, declared by Ark. Code Ann. § 15-20-1104 and described more specifically in Subtitle II of these Rules, which has been determined to be an area in which the soil concentration of one or more nutrients is so high or the physical characteristics of the soil or area is such that continued application of the nutrient to the soil could negatively impact soil fertility and the waters within the state.

S. “Operator” means the person(s) with control over the day-to-day operation of, or decision-making authority over, the facility, process, or physical location to which the term is applied.

T. “Person” means any legal entity including, without limitation, any individual, partnership, company, association, fiduciary, corporation, limited liability company, cooperative, or any organized group of persons whether incorporated or not.

U. “Poultry” means chickens, turkeys, ducks, geese, and any other domesticated birds.

V. “Poultry feeding operation” means any lot or facility where two thousand five hundred (2,500) or more poultry are housed or confined and fed or maintained on any one day in the preceding twelve-month period. For the purposes of determining the number of animals at an operation, multiple poultry houses under common ownership are considered to be a single poultry feeding operation if they adjoin each other or if they share a common area or system for the disposal of wastes.

W. “Poultry litter management plan” means the documented plan for use, disposal, and storage of litter by poultry feeding operations as further described in Subtitle IV of these Rules.

X. “Protective rate” or “Arkansas Protective Rate” means the application rate for commercial fertilizers approved by the Commission for designated nutrients that provides for proper crop utilization and prevention of significant impact to waters within the state.

Y. “Warning letter” means a written description signed by the Director of a violation of this Title and the necessary corrective action. A warning letter cannot be used to assess civil penalties, is not appealable to the Commission, and is not final agency action.

Z. “Waters within the state” means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, that are contained within, flow through, or border upon this State or any portion of this State.

Section 2201.5 Severability.

If any provision of this Title or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Title which can be given effect without the invalid provision or application, and to this end the provisions of this Title shall be considered severable.

Subtitle II. Nutrient surplus areas

Section 2202.1 Declared nutrient surplus areas.

Act 1061 of 2003 (codified at Ark. Code Ann. § 15-20-1104) declared the following areas to be nutrient surplus areas:

1. The Illinois River watershed, included within Benton, Washington, and Crawford counties;
2. The Spavinaw Creek watershed, included within Benton County;
3. The Honey Creek watershed, included within Benton County;
4. The Little Sugar Creek watershed, included within Benton County;
5. The upper Arkansas River watershed, which includes Lee Creek within Crawford and Washington counties, and Massard Creek within Sebastian County;
6. The Poteau River watershed, included within Scott, Sebastian, and Polk counties;
7. The Mountain Fork of the Little River watershed, included within Polk County; and
8. The upper White River watershed above its confluence with Crooked Creek.

Section 2202.2 Geographic boundaries of nutrient surplus areas.

A. The Commission further defines the geographic boundaries of the designated nutrient surplus areas listed in Section 2202.1 by utilizing the National Datasets for Natural Resource Analysis. Hydrologic Units have been classified based on data compiled by United States Geological Survey, Natural Resources Conservation Service and others. Each hydrologic unit is identified by a unique hydrologic unit code (HUC). Detailed maps and digital coverage of the boundaries are available at the Commission office or district office. Hydrologic unit codes for the nutrient surplus areas are as follows:

1. Illinois River watershed: HUC 11110103
2. Spavinaw Creek watershed: HUC 11070209
3. Honey Creek watershed: HUC 11070206

4. Little Sugar Creek watershed: HUC 11070208
 5. Upper Arkansas River watershed (which includes Lee Creek within Crawford and Washington Counties, and Massard Creek within Sebastian County): HUC 11110104
 6. Poteau River watershed: HUC 11110105
 7. Mountain Fork of the Little River watershed: HUC 11140108
 8. Upper White River watershed above its confluence with the Buffalo River: HUC 11010001 and HUC 11010003 (excluding coverage under HUC 1101000308, 1101000309, 1101000310, and 110100031108).
- B. See Appendix A for general coverage map.

Section 2202.3 Requirements applicable to nutrient surplus areas.

A. Except as provided in Subsection G of this Section, no person shall apply nutrients to soils or associated crops within a nutrient surplus area unless nutrients are applied in compliance with a nutrient management plan or a poultry litter management plan prepared by a certified nutrient planner or at the protective rate for commercial fertilizers set forth in Section 2202.5.

1. Any person applying nutrients from poultry litter to soils or associated crops within a nutrient surplus area must apply in compliance with a nutrient management plan or poultry litter management plan.

2. After a soil test with nutrient application recommendations is obtained for lands within a nutrient surplus area, a person may apply commercial fertilizer in compliance with the protective rate.

3. The protective rate as indicated by the soil test shall constitute a permit to apply nutrients consistent with that rate.

B. Except as provided in Subsection G of this Section, no owner or operator of land within a nutrient surplus area shall allow nutrient application to soils or associated crops on that land unless the nutrients are applied in compliance with a nutrient management plan or a poultry litter management plan or at the protective rate.

C. It shall be unlawful for any person to apply nutrients to soils or associated crops within a nutrient surplus area unless the nutrient application is done in compliance with the time, place, and manner restrictions determined necessary by the Commission and set forth in Section 2202.4.

D. It shall be unlawful for any poultry feeding operation to operate within a nutrient surplus area unless the poultry feeding operation develops and implements a poultry litter management plan.

E. Except as provided in Subsection G of this Section, it shall be unlawful for any person other than a certified nutrient applicator to make a nutrient application within a nutrient surplus area unless the person making application is a volunteer or an employee under the direction or control of a certified nutrient applicator.

F. Except as provided in Subsection G of this Section, nutrient application within a nutrient surplus area shall be documented in records maintained by the nutrient applicator and the owner or operator of the land where nutrient application is made, in sufficient detail to demonstrate that the nutrient application was conducted in compliance with these Rules. Such records shall be maintained for a minimum of five years or for such longer period of time as may be required by an approved nutrient management plan, and shall be available for inspection by

the Commission or conservation district employees upon request. Records maintained by commercial fertilizer distributors or applicators may be relied upon to meet this requirement.

G. 1. Nutrient application within a nutrient surplus area on residential lands of two and one-half (2.5) acres or less (“residential nutrient application”) shall be applied at a rate not to exceed the protective rate set forth in Section 2202.5 and in compliance with the time, place, and manner restrictions set forth in Section 2202.4, or in compliance with an approved nutrient management plan.

2. A nutrient management plan is not required for residential nutrient application as defined in this Subsection, but may be voluntarily obtained.

3. The landowner or resident making a residential nutrient application, as defined in this Subsection, is not required to be a certified nutrient applicator, but is required to maintain documentation of each nutrient application for a minimum of five years sufficient to demonstrate compliance with the time, place, and manner restrictions in Section 2202.4 and either the protective rate requirements in Section 2202.5 or an approved nutrient management plan.

H. Upon written request, the Executive Director may waive any provision of these rules consistent with the purposes of this Title as set forth in Section 2201.1.

I. Persons applying poultry litter to land within the Spavinaw-Eucha Watershed, including Benton County, as defined by *The City of Tulsa et al. v. Tyson Foods, Inc. et al*, No. 01 CV 0900EA(C), (Northern District of Okla. July 16, 2003) must follow any term of that suit in conflict with these rules.

Section 2202.4 Time, place, and manner restrictions.

A. The time, place, and manner restrictions in this Section apply to all nutrient applications within a nutrient surplus area.

B. Nutrients shall be evenly distributed over application sites. Application of nutrients from poultry litter shall be made only at the rates and in the manner specified in a nutrient management plan. If the owner or operator does not have a nutrient management plan for commercial fertilizers, then nutrient application of commercial fertilizers shall not exceed the protective rate.

C. Nutrient application shall not be undertaken when soil is saturated, frozen, or covered with ice or snow.

D. Nutrients shall not be applied in any manner that will allow excessive nutrients to enter waters within the state or to run onto adjacent property.

E. Nutrient application directly to water intended to increase fish production shall not be permitted unless the Executive Director determines that nutrients may be applied without adversely affecting water quality.

Section 2202.5 Protective rate.

A. All nutrient applications of commercial fertilizers within a nutrient surplus area must comply with the protective rate set forth in Appendix B unless a different rate is specified in an approved nutrient management plan.

B. The protective rate is the rate of a designated nutrient that provides for proper crop use and prevents significant impact to waters within the state. A soil test is required before applying commercial fertilizers containing phosphorus at the protective rate. Commercial

fertilizer containing nitrogen but not phosphorus may be applied without a soil test. Specific rates are set out in Appendix B of these rules.

Subtitle III. Nutrient management plans

2203.1 Obtaining a nutrient management plan.

A. Any person seeking a nutrient management plan should contact the local conservation district and request a plan. The person seeking a nutrient management plan may also contact third parties who have obtained certification from the Commission to develop plans.

B. A certified planner will certify by his signature that each plan he drafts meets all applicable standards and will provide a copy to the owner for review. The certified planner will also provide a copy of each drafted plan to the conservation district where a majority of the facility is located. The conservation district board will review each plan to determine whether it meets all applicable standards. If the standards are met, the conservation district shall approve the plan and retain one copy. If the conservation district board does not approve a plan, it shall provide the owner written notice of the denial and its basis.

C. An owner may appeal a conservation district denial of plan approval or any provision of a certified and approved nutrient management plan within 90 days by applying in writing to the Executive Director. The owner must follow the plan during the appeal process. The Executive Director will consider appeals only when the owner asserts that the applicable standards were not followed in drafting the plan or that a conservation district failed to approve a plan which meets those standards. The Executive Director may deny the appeal, modify the plan, or approve the plan. The owner may appeal an unfavorable decision to the full Commission upon written application within 30 days. The Commission's decision may be appealed as provided in Section 2206.4.

D. Any plan obtained by a person prior to the effective date of these rules meets the requirements of this Title if developed using the Arkansas Phosphorus Index.

E. An approved plan shall constitute a permit to apply nutrients consistent with the plan.

Section 2203.2 Substitution of existing Arkansas Water and Air Pollution Control Act permit for nutrient management plan.

A. If a nutrient application process within a nutrient surplus area is a part of a process or system for which a permit has been issued and is in effect pursuant to the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101 et seq., or other similar federal or state law, and if the permit contains conditions regulating nutrient application acceptable to the conservation district, then the permit may be substituted for and serve as the nutrient management plan.

B. Before such permit is effective as a substitute for a nutrient management plan, the permittee must submit a complete copy of the permit to the local conservation district and request approval in writing.

C. Upon approval by the conservation district, the permit shall be substituted for and serve as the nutrient management plan required by these rules, and all other requirements of these rules shall apply.

Section 2203.3 Contents of a nutrient management plan.

A. A nutrient management plan shall contain sufficient documentation to demonstrate that nutrients will be managed within the nutrient management unit in compliance with these rules and in a manner sufficient to protect the waters within the state.

B. A proposed nutrient management plan shall address the following major elements: (1) general site information, (2) applicable permits and certifications, (3) nutrient application site information, (4) nutrient application plans, (5) actual activity records, and (6) operation and maintenance. The precise content of a nutrient management plan will vary as necessary to meet the needs of the specific nutrient management unit addressed. Unless clearly inapplicable, a nutrient management plan shall address all of the items listed under the six major elements shown below in this section.

1. General site information

a. Names, phone numbers, and addresses of the owner(s) and operator(s) of all lands within the nutrient management unit.

b. Location of site: legal description of all lands in the nutrient management unit, driving instructions from the nearest municipality, street address, and emergency 911 coordinates.

c. Sketch or aerial photograph of farmstead and all fields in the nutrient management unit.

d. Operation procedures.

e. Existing documentation of present facility components that would aid in evaluating existing conditions.

2. Applicable permits and certifications

a. Federal, State, or local permits or ordinances, if applicable.

b. Operator or manager certifications, if applicable.

c. Certification number of certified nutrient planner responsible for developing plan.

d. Records of inspections or site assessments, if applicable.

3. Nutrient Application site information

a. Date plan was prepared.

b. Written agreements, if any, relating to nutrient application.

c. Aerial maps of nutrient application areas.

d. Individual field maps with marked conservation features, setbacks, buffers, waterways, poultry houses or facilities, surface water features, and environmentally sensitive areas such as sinkholes, wells, gullies, tile inlets, etc.

e. Landowner and operator names, addresses, and phone numbers.

f. Eight-digit watershed codes for nutrient application sites.

g. Specific and unique field identification codes, if applicable.

h. Land use designation, if applicable.

i. Soil map with appropriate interpretations.

j. Calculations, assumptions, interpretations, and narrative description demonstrating appropriate application of the Phosphorus Index in development of the proposed nutrient application rates.

k. Land treatment practices planned, applied, and level of treatment provided.

4. Nutrient Application

- a. Crop types, realistic yield targets, and expected nutrient uptake amounts, if available.
- b. Application equipment descriptions and methods of application.
- c. Expected application seasons and estimated days of application per season.
- d. Proposed nutrient application rates; i.e., amounts per acre (volume in gallons or tons per acre, and pounds of plant available nitrogen, phosphorus as P₂O₅, and potassium as K₂O per acre), and detailed information on the calculations, assumptions, and interpretations used to determine application rates.
- e. Estimate of acres needed to apply litter generated on the nutrient management unit or by any related poultry feeding operation, if applicable, consistent with application of the Phosphorus Index and respecting any guidelines published for nitrogen and other nutrient loading limits.

5. Actual activity records

- a. Soil tests – not more than five years old.
- b. Litter test results – not more than five years old.
- c. Planned and applied rates, methods of application, and timing (month and year) of all sources of nutrients applied.
- d. Current and planned crop rotation.
- e. Records of any spill events.

6. Operation and Maintenance

- a. Reasonably detailed operation and maintenance procedures and schedules for all aspects of the nutrient management plan including, by way of example, holding systems, litter storage, land application, application equipment, soil and nutrient source sampling techniques, etc.
- b. Description of recordkeeping procedures including records for date and location of each nutrient application, amount of litter or other nutrients applied, phosphorus content of the soil, phosphorus content of litter or other nutrient source, application rates used, source of litter or other nutrients, and total acreage of nutrient applications.
- c. Designation of when periodic review and revision of the plan will occur. See Section 2203.5.

Section 2203.4 Additional plan content.

The certified nutrient planner should incorporate additional plan requirements as appropriate if required by incentive programs which apply to a specific owner or operator.

Section 2203.5 Review and revision of nutrient management plans.

- A. nutrient management plans shall be reviewed by the owner or operator of the nutrient management unit at least annually to determine if adjustments or modifications are needed.
- B. Plans would need to be modified if the facilities were expanded, total acreage receiving nutrient application changes, use of acreage changes, or facilities are under control of a different owner or operator.
- C. Nutrient management plans shall be reviewed thoroughly by a certified nutrient planner every five years and a report of the five-year review shall be provided to the local conservation district within 120 days following the end of the fifth annual growing period

identified in the plan. The five-year review shall update the existing plan with recent soil and litter testing data. All other information required to be included in a nutrient management plan in Section 2203.3 of this Subtitle shall be updated with current information.

Section 2203.6 Record keeping requirements.

A. Records required to be compiled or kept by these rules or by the provisions of any approved nutrient management plan shall be maintained by the owner and operator of the lands within the nutrient management unit for a minimum period of five years and shall be available for inspection by the Commission or conservation district employees upon reasonable request. Such records shall not be public records.

B. Records required to be compiled or kept by these rules or by the provisions of any approved nutrient management plan relating to the activities of a nutrient applicator shall be maintained by the nutrient applicator for a minimum period of five years and shall be available for inspection by the Commission or conservation district employees upon reasonable request. Such records shall not be public records.

C. Owners, operators, and applicators may rely on records maintained by commercial fertilizer distributors and applicators to meet these requirements.

Subtitle IV. Poultry litter management plans

Section 2204.1 Obtaining a poultry litter management plan.

A. Any person seeking a poultry litter management plan should contact the local conservation district and request information on how to obtain a plan. The person seeking a poultry litter management plan may also contact third parties who have obtained certification from the Commission to develop plans.

B. A certified planner will certify by his signature that each plan he drafts meets all applicable standards and will provide a copy to the owner for review. The certified planner will also provide a copy of each drafted plan to the conservation district where a majority of the facility is located. The conservation district board will review each plan to determine whether it meets all applicable standards. If the standards are met, the conservation district shall approve the plan and retain one copy. If the conservation district board does not approve a plan, it shall provide the owner written notice of the denial and its basis.

C. An owner may appeal a conservation district denial of plan approval or any provision of a certified and approved nutrient management plan within 90 days by applying in writing to the Executive Director. The owner must follow the plan during the appeal process. The Executive Director will consider appeals only when the owner asserts that the applicable standards were not followed in drafting the plan or that a conservation district failed to approve a plan which meets those standards. The Executive Director may deny the appeal, modify the plan, or approve the plan. The owner may appeal an unfavorable decision to the full Commission upon written application within 30 days. The Commission's decision may be appealed as provided in Section 2206.4.

D. Any plan obtained by a person prior to the effective date of these rules meets the requirements of this Title if the plan was developed using the Arkansas Phosphorus Index.

E. An approved plan shall constitute a permit to apply nutrients consistent with the plan.

Section 2204.2 Contents of a poultry litter management plan.

A. A poultry litter management plan shall contain sufficient documentation to demonstrate that litter and associated nutrients will be managed in compliance with these Rules and in a manner sufficient to protect the waters within the state.

B. A proposed poultry litter management plan shall address the following major elements: (1) general site information, (2) production information, (3) applicable permits and certifications, (4) land application site information, (5) land application plans, (6) actual activity records, (7) mortality disposal procedures, and (8) operation and maintenance. The precise content of a poultry litter management plan will vary as necessary to meet the needs of the specific poultry feeding operation(s) addressed in the plan. Unless clearly inapplicable, a poultry litter management plan shall address all of the items listed under the eight major elements shown below in this Section.

1. General site information

- a. Names, phone numbers, and addresses of the owner(s) and operator(s) of the poultry feeding operation.
- b. Location of poultry feeding operation: legal description of all lands and facilities in the poultry feeding operation, driving instructions from the nearest municipality, street address, and emergency 911 coordinates.
- c. Sketch or aerial photograph of poultry feeding operation.
- d. Operation procedures specific to the poultry feeding operation, including an emergency action plan for litter storage and handling.
- e. Any other information requested by the Commission.

2. Poultry production information

- a. Poultry types, phases of production, and length of confinement for each type.
- b. Animal count and average weight.
- c. Calculated litter volumes.
- d. Litter storage type, volume, and approximate time period of storage.

3. Applicable permits and certifications

- a. Federal, State, or local permits or ordinances, if applicable.
- b. Operator or manager certifications, if applicable.
- c. Certification number of certified nutrient planner responsible for developing poultry litter management plan.
- d. Records of inspections or site assessments, if applicable.

4. Land Application site information

- a. Date plan was prepared.
- b. Written agreements, if any, relating to litter transfers and land application.
- c. Aerial maps of land application areas.
- d. Individual field maps with marked conservation features, setbacks, buffers, waterways, poultry houses or facilities, surface water features, and environmentally sensitive areas such as sinkholes, wells, gullies, tile inlets, etc.
- e. Landowner and operator names, addresses, and phone numbers.
- f. Eight-digit watershed codes for the land application sites.
- g. Specific and unique field identification codes, if applicable.
- h. Land use designation, if applicable.
- i. Soil map with appropriate interpretations.

j. Calculations, assumptions, interpretations, topographic maps, and narrative description demonstrating appropriate application of the Phosphorus Index in development of the proposed land application rates.

k. Land treatment practices planned, applied, and level of treatment provided.

5. Land Application

a. Crop types.

b. Application equipment descriptions and methods of application.

c. Expected application seasons and estimated days of application per season.

d. Proposed land application rates; i.e., amounts per acre (volume in gallons or tons per acre, and pounds of plant available nitrogen, phosphorus as P₂O₅, and potassium as K₂O per acre), and detailed information on the calculations, assumptions, and interpretations used to determine application rates.

e. Estimate of acres needed to apply litter generated by the poultry feeding operation, consistent with application of the Phosphorus Index and respecting any guidelines published for nitrogen and other nutrient loading limits.

6. Actual activity records

a. Soil tests – not more than five years old.

b. Litter test results – not more than five years old.

c. Planned and applied rates, methods of application, and timing (month and year) of all sources of nutrients applied.

d. Current and planned crop rotation.

e. Actual crop yield and harvest from land application sites.

f. Records of internal inspections for litter storage, handling, and application system components.

g. Records of any spill events.

h. Records of all land applications, both within and outside of nutrient surplus areas.

i. For any litter not land applied, records demonstrating that the litter was converted to a non-nutrient use or other use acceptable to the Commission.

7. Mortality disposal

a. Plan for mortality disposal including approved site for catastrophic die-off.

b. Methods and equipment used to implement the disposal plan, including any applicable permits.

8. Operation and Maintenance

a. Reasonably detailed operation and maintenance procedures and schedules for all aspects of the poultry litter management plan including, by way of example, litter storage and handling systems, land application, application equipment, soil and litter sampling techniques, etc.

b. Description of recordkeeping procedures including records for date and location of each land application, amount of litter or other nutrients applied, phosphorus content of the soil, phosphorus content of litter or other nutrient source, application rates used, source of litter or other nutrients, and total acreage of land applications.

c. Designation of the annual growing period that will be used for purpose of periodic review and revision of the plan. See Section 2204.3.

Section 2204.3 Review and revision of poultry litter management plans.

A. Poultry litter management plans shall be reviewed by the owner or operator at least annually to determine if adjustments or modifications are needed.

B. Plans shall be modified if facilities are expanded, total acreage receiving nutrient application changes, use of acreage changes, or facilities are under control of a different operator.

C. Poultry litter management plans shall be reviewed thoroughly by a certified nutrient planner every five years, and a report of the five-year review shall be provided to the Commission within 120 days following the end of the fifth annual growing period identified in the plan. The five-year review shall update the existing plan with recent soil and litter testing data. All other information required to be included in a poultry litter management plan in Section 2204.2 of this Subtitle shall be updated with current information.

Section 2204.4 Record keeping requirements.

A. Records required to be compiled or kept by these Rules or by the provisions of any approved poultry litter management plan shall be maintained by the owner and operator of the poultry feeding operation for a minimum period of five years and shall be available for inspection by the Commission or conservation district employees upon reasonable request. Such records shall not be public records.

B. Records required to be compiled or kept by these rules or by the provisions of any approved poultry litter management plan relating to the activities of a nutrient applicator shall be maintained by the nutrient applicator for a minimum period of five years and shall be available for inspection by the Commission or conservation district employees upon reasonable request. Such records shall not be public records.

C. Owners, operators, and applicators may rely on records maintained by commercial fertilizer distributors and applicators to meet these requirements.

Section 2204.5 Comprehensive nutrient management plans.

If an owner or operator obtains a comprehensive nutrient management plan properly developed by the United States Department of Agriculture, the Arkansas Natural Resources Commission, or a conservation district and based on the Arkansas Phosphorus Index, then he is not required to obtain a nutrient management plan, a poultry litter management plan, or apply at the Protective Rate.

Subtitle V. Sale or transfer of litter

Section 2205.1 No responsibility of transferor for use of litter after transfer.

Upon the sale or transfer of litter from a poultry feeding operation within a nutrient surplus area to any user, the poultry feeding operation shall not be responsible for the use of the litter by the purchaser or other transferee. Notwithstanding the foregoing, the poultry feeding operation remains responsible for use of the litter in compliance with this Title until actual possession of the litter transfers to the purchaser or transferee and the litter is removed from the poultry feeding operation premises.

Section 2205.2 Responsibility of litter user.

Any person receiving litter from a poultry feeding operation within a nutrient surplus area who intends to use the litter for a purpose other than land application must use the litter in a manner approved by the Commission. If the person receiving the litter intends to transfer the litter to others, the person must keep transfer records.

Subtitle VI. Enforcement

Section 2206.1 Commission right to inspect.

A. Commission and conservation district employees may enter upon and inspect private property to determine compliance with the requirements of this Title.

B. Entry shall not occur without prior notification of the owner, operator, or agent in charge of the property. Notice shall be given to the owner, operator, or agent at least 72 hours before entry.

C. Documentation of bio-security measures taken and bio-security certification received by the Commission agent, including a bio-security log book, shall be made available to the owner or operator upon request.

D. Upon notice of disease outbreak by the Arkansas Livestock and Poultry Commission, inspection under this title shall be automatically suspended until notification by the Arkansas Livestock and Poultry Commission that it is safe to resume inspections.

Section 2206.2 Administrative enforcement procedures.

A. Upon complaint or suspicion of suspected violation of any provision of this Title, Commission staff may investigate or cause an investigation to be undertaken and may recommend disciplinary action to the Director.

1. Anyone providing information to the Commission about a possible violation must provide a written complaint stating the complainant's legal name and current mailing and physical addresses. The complaint must be verified by the notarized signature of the complainant.

2. Complaints are subject to the Freedom of Information Act, Ark. Code Ann. § 25-19-101 et seq.

B. After reviewing evidence provided to him or her regarding a possible violation, the Director will determine whether there is evidence that a violation has occurred. If the Director finds that a violation occurred, the Director may issue a warning letter or administrative consent order to the alleged violator, stating the violation and the resulting corrective or disciplinary action. If an incomplete complaint is received or the Director finds that there is not sufficient evidence of a violation, the Director will inform the complainant and alleged violator in writing.

Section 2206.3 Administrative penalties.

A. Upon the first violation of these rules within any one-year period, the alleged violator shall be issued a warning letter. For the second violation within any one-year period, the Director may assess not more than fifty dollars (\$50) in cumulative civil penalties. Upon the third violation within any one-year period, the Director may impose a penalty not to exceed two thousand five hundred dollars (\$2,500.00) for each violation of Ark. Code Ann. §15-20-1101 et seq. and this Title.

1. Any fees collected by the Commission through any penalty assessed under this Title shall be deposited in the state treasury and shall be used to operate the programs administered by the Commission through Titles 19, 20, 21, and 22 of the Commission's rules.

B. A warning letter or administrative consent order may be served by certified mail, restricted delivery, return receipt requested to the address on file with the Commission or district or by any means sufficient for service of process in a civil court action.

C. The person receiving an administrative consent order may choose to sign the administrative consent order and thereby agree to the penalties and other terms and conditions contained within the order. If the person receiving an administrative consent order fails to respond in writing to the Commission within thirty days after receipt of the administrative consent order, and receipt has been confirmed by a certified mail receipt or proof of personal service, the person will be deemed to have agreed to the penalties and other terms and conditions contained within the order, which shall become final.

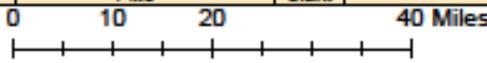
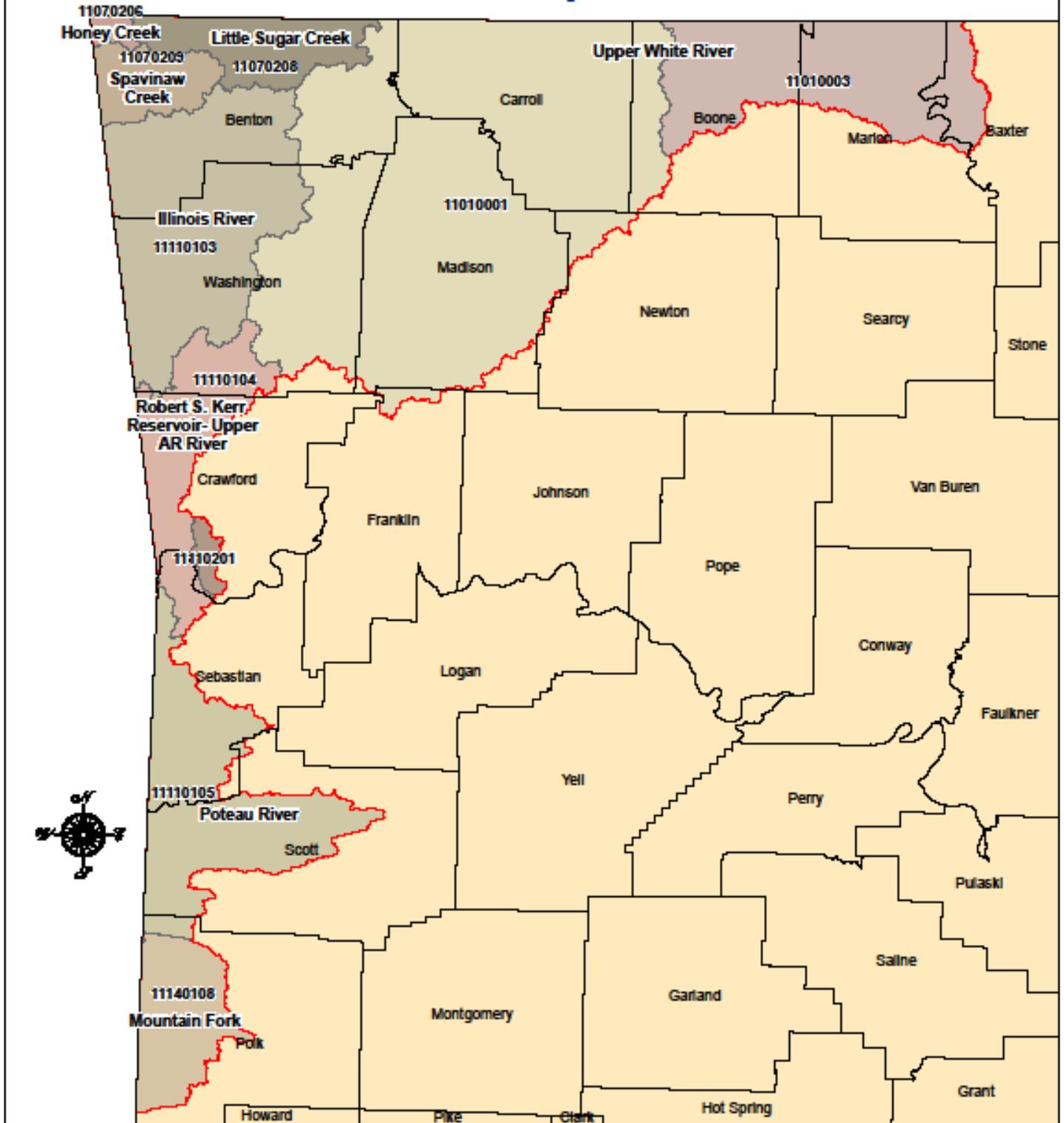
D. Upon receipt of an administrative consent order, the person to whom the order is directed may object and request a hearing before the Commission by delivering such request in writing to the Commission within thirty days, setting forth the reasons why the Person disagrees with the allegations in the order and any proposed penalty. The hearing will be conducted in accordance with Commission Rules, Title I. The Commission has the burden of proving the alleged facts and violations of law stated in the administrative consent order. The Commission and the Director may issue subpoenas to any witness requiring his or her attendance and testimony before the Commission as provided in Ark. Code Ann. § 15-22-208.

E. The Commission will not take final administrative action against a person accused of violating this Title or Ark. Code Ann. § 15-20-1101 et seq. until the accused person has consented to an administrative consent order or until the person has had an opportunity for a hearing to review the suspected violation and proposed penalty under Commission Rules, Title I. The final decision of the Commission shall include findings of fact and conclusions of law, and shall otherwise conform to the requirements of Ark. Code Ann. § 25-15-210.

Section 2206.4 Judicial review.

By law, a person who considers himself or herself injured in his or her person, business, or property by an executed administrative consent order or a Commission order following a hearing has the right to appeal the case to district court in his county of residence, the county where he does business, or in Pulaski County within thirty days of the decision. The executed administrative consent order or Commission decision shall constitute final agency action for the purpose of judicial review. Judicial review of final agency action shall be as provided by the Arkansas Administrative Procedure Act, Ark. Code Ann. § 25-15-201 et. seq.

Nutrient Surplus Area



Legend

- Nutrient Surplus Area
- County Boundary

*Shaded areas represent
8 Digit Hydrologic Unit Codes



Title XXII

Appendix B, Protective Rate Tables
for Application of Commercial Fertilizers

Table 1- Protective rate of commercial P fertilizer for grasses and clover. Values in lbs P₂O₅/acre.

	Low soil test p (0-50 lbs/acre)	Med. Soil test P (50-100 lbs/acre)	High soil test P (>100 lbs/acre)	Soil test P not known
Fertilizer application rate (lbs P ₂ O ₅ /acre)	80	40	0	0

Table 2- Protective Rate of Commercial Phosphate Fertilizer for Row Crops (in lbs P₂O₅/acre). Commercial P fertilizer should not be applied if soil test P is unknown.

Crop	Low Soil Test P 0-50 lbs P/acre	Medium Soil Test P 50-100 lbs P/acre	High Soil Test P >100 lbs P/acre
Corn	80	50	0
Cotton	60	30	0
Grain Sorghum	60	40	0
Rice	40	0	0
Soybeans	40	0	0
Wheat	60	30	0

Title XXII
 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 3- Protective Rate of Commercial Phosphate Fertilizer for Fruits and Vegetables (in lbs P₂O₅/acre). Commercial P fertilizer should not be applied if soil test P is unknown.

Crop	Low Soil Test P 0-50 lbs P/acre	Medium Soil Test P 50-100 lbs P/acre	High Soil Test P >100 lbs P/acre
Sweet Corn	80	40	0
Irish Potatoes	80	40	0
Tomatoes	80	60	0
Okra, Eggplant, Peppers, Cabbage, Broccoli, and Cauliflower	80	60	0
Sweet Potatoes	80	80	0
Watermelon, Cantaloupe, Squash, and Pumpkins	60	50	0
Cucumbers	80	70	0
Spinach, Collards, Mustard Greens, Kale, and Turnip Greens	60	60	0
Snapbeans	90	45	0
Pole Beans, Lima Beans, Dry Beans, and English Peas	80	40	0

Title XXII

Appendix B, Protective Rate Tables
for Application of Commercial Fertilizers

Table 3- (Continued) Protective Rate of Commercial Phosphate Fertilizer for Fruits and Vegetables (in lbs P₂O₅/acre). Commercial P fertilizer should not be applied if soil test P is unknown.

Southern or Summer Peas	80	40	0
Grapes	80	30	0
Strawberries	90	90	0
Blackberries and Raspberries	60	30	0
Blueberries	60	0	0

Table 4- Protective Rate of Commercial Phosphate Fertilizer for Trees and Ornamentals (in lbs P₂O₅/acre). Commercial P fertilizer should not be applied if soil test P is unknown.

Crop	Low Soil Test P 0-50 lbs P/acre	Medium Soil Test P 50-100 lbs P/acre	High Soil Test P >100 lbs P/acre
Fruit Trees - Pears, Cherries, Apples, Peaches, Plums and Figs	0.3 lbs P ₂ O ₅ /tree	0	0
Pecans and Walnuts	80	40	0
Pine Nursery Seedlings	60	30	0
Christmas Trees	50	0	0
Ornamentals	50	50	0

Title XXII
 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 5- Protective rate for commercial P fertilizer for grasses and legumes. Values are in lbs product/acre.

Fertilizer Type	Low soil test P (0-50 lbs/acre)	Med. Soil test P (50-100 lbs/acre)	High soil test P (>100bs/acre)	Soil test P not known
0-46-0	175	88	0	0
13-13-13	600	300	0	0
10-20-10	400	200	0	0
Miracle Grow (20-27-5)	300	150	0	0
Scott's weed And Feed (28-3-3)	Base rate on nitrogen needs	Base rate on nitrogen needs	0	0

Title XXII
 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 6– Protective rate for commercial N fertilizer. Values in lbs/acre.

Forage type	Low soil test P (0-50 lbs/acre)	Med. Soil test P (50-100 lbs/acre) applications	High soil test P (>100 lbs/acre)	Additional applications
Warm season grasses	80	80	80	Add 50-60 lbs N/acre as needed
Cool season grasses	45	45	50	Add 50-60 lbs N/acre as needed
Improved warm season pastures	45	45	50	Add 50-60 lbs N/acre as needed
Alfalfa	0	0	0	
Warm season grass/clover	0	0	0	Add 80 lbs N/acre when clover is dormant
Cool season grass/clover	60	60	60	
Cool season grass on warm season grass	60	60	60	Add 60-80 lbs N/acre as needed
Warm season Perennial legume	0	0	0	

Title XXII
 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 7– Protective rate for commercial N fertilizer. Values in lbs/acre.

Forage type	N Rate	Additional application
Warm season grasses	80	Add 50-60 lbs N/acre as needed
Cool season grasses	45	Add 50-60 lbs N/acre as needed
Improved warm season pastures	45	
Alfalfa	0	
Warm season grass/clover	0	Add 80 lbs N/acre when clover is dormant
Cool season grass/clover	60	
Cool season grass on warm season grass	60	Add 60-80 lbs N/acre as needed
Warm season perennial legume	0	

Title XXII
 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 8- Protective Rate of Commercial Nitrogen Fertilizer for Row Crops (in lbs N/acre).

Crop	lbs N/acre	Comments
Corn	120	Based on yield of 125 bushels/acre; increase N rate by 30 lbs/acre for each 25 bushel increase in yield
Cotton	100	Reduce N rate if soil nitrate levels are high based on University of Arkansas recommendations
Grain Sorghum	100	Increase rate by 30 lbs/acre when yields are greater than 6,000 lbs/acre or when irrigated
Rice	75-150	Adjust N rates according to variety grown and crop rotation as recommended by University of Arkansas.
Soybeans	0	
Wheat	90	

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 Appendix B, Protective Rate Tables
 for Application of Commercial Fertilizers

Table 9- Protective Rate of Commercial Nitrogen Fertilizer for Fruits and Vegetables (in lbs N/acre).

Crop	lbs N/acre	Comments
Sweet Corn	50	Sidedress 50 lbs N/acre when plants are 12"
Irish Potatoes	50	Sidedress 40 lbs N/acre when plants are 6"
Tomatoes	40	Sidedress 30 lbs N/acre when fruit set begins
Okra, Eggplant, Peppers, Cabbage, Broccoli, and Cauliflower	40	Sidedress 30 lbs N/acre when appropriate
Sweet Potatoes	40	
Watermelon, Cantaloupe, Squash, and Pumpkins	30	Sidedress 30 lbs N/acre at flowering
Cucumbers	40	Sidedress 40 lbs N/acre when vines start to run
Spinach, Collards, Mustard Greens, Kale, and Turnip Greens	30	Sidedress 30 lbs N/acre after stand is assured
Snapbeans	30	

Title XXII
Appendix B, Protective Rate Tables
for Application of Commercial Fertilizers

Table 9- (Continued) Protective Rate of Commercial Nitrogen Fertilizer for Fruits and Vegetables (in lbs N/acre).

Pole Beans, Lima Beans, Dry Beans, and English Peas	20	
Southern or Summer Peas	20	
Grapes	30	Sidedress additional 30 lbs N/acre each month during the growing season, as needed
Strawberries	90	
Blackberries and Raspberries	30	Sidedress 30 lbs N/acre following harvest
Blueberries	60	Apply additional 30-60 lbs N/acre/year when plants are 3 to 4 years old, as needed

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Appendix B, Protective Rate Tables
for Application of Commercial Fertilizers

Table 10- Protective Rate of Commercial Nitrogen Fertilizer for Trees and Ornamentals (in lbs N/acre).

Crop	lbs N/acre
Fruit Trees - Pears, Cherries, Apples, Peaches, Plums and Figs	0.3 lbs N/tree
Pecans and Walnuts	40
Pine Nursery Seedlings	30
Christmas Trees	20
Ornamentals	25