U.S. DEPARTMENT OF AGRICULTURE Farm Service Agency

Draft ENVIRONMENTAL ASSESSMENT



Hempstead County, Arkansas

Broiler Farm Expansion Proposal

Prepared By
Adam Kaufman, USDA, Farm Service Agency
State Environmental Coordinator

12/14/2023

COVER SHEET

| Proposed Action: | The Farm Service Agency of the United States Department of Agriculture proposes to provide Farm Loan Program assistance to finance the construction of (2) 46' x 575' broiler houses and related infrastructure. The proposed action would expand an existing (4) house broiler farm. The physical location of this proposal would take place 2.4 miles southwest of Hope, AR in Section 8, Township 13 South, Range 24 West, Hempstead county, Arkansas. | | |
|-----------------------|--|--|--|
| Type of Document: | This is a site-specific Environmental Assessment | | |
| Lead Agency: | United States Department of Agriculture (USDA) Farm Service Agency (FSA) | | |
| Cooperating Agencies: | None | | |
| Further Information: | Adam Kaufman, USDA, Farm Service Agency, 419 West Gaines Street, Monticello, AR 71655. | | |
| Comments: | This Environmental Assessment (EA) was prepared in accordance with USDA FSA National Environmental Policy Act (NEPA) implementing procedures found in 7 CFR 799, as well as the NEPA of 1969, Public Law 91-140, 42 US Code 4321-4347, as amended. A Notice of Availability (NOA) of the Draft EA will be published on 12/14/2023 and 12/21/2023 with the proposed location and instructions for providing written comments. A copy of the Draft EA and related material will also be made available as provided by the NOA at USDA, Farm Service Agency, 300 WEST COMMERCE BLVD HOPE, AR 71801. The Draft EA document itself will be posted from 12/14/2023 thru 01/15/2024 on the FSA State website at: https://www.fsa.usda.gov/state-offices/Arkansas/index Anyone that wants to comment on the proposal should put their comments in writing and mail them to the following USDA Service Center: USDA, Farm Service Agency Attn: Adam Kaufman 419 W. Gaines St. Monticello, AR 71655 | | |

TABLE OF CONTENTS

| 1. Introduction | 8 |
|---|----|
| 1.1 Background | 8 |
| 1.2 Purpose and Need for the Proposed Action | 8 |
| 1.3 Decision To Be Made | 9 |
| 1.4 Regulatory Compliance | 9 |
| 1.5 Public Involvement and Consultation | 9 |
| 1.5.1 Internal Scoping | 9 |
| 1.5.2 External Scoping | 10 |
| 1.5.3 Public Involvement | 10 |
| 2. Description of Proposed Action and Alternatives | 11 |
| 2.1 Alternative A - Proposed Action | 11 |
| 2.2 Alternative B - No Action Alternative | 12 |
| 2.3 Alternative C | 12 |
| 2.4 Alternatives Considered but Eliminated From Analysis | 13 |
| 3. Affected Environment and Impacts | 14 |
| 3.1 Resources Eliminated from Detailed Analysis | 14 |
| 3.2 Resources Considered with Detailed Analysis | 16 |
| 3.2.1 Wildlife and Habitat | 16 |
| 3.2.2 Cultural Resources | 17 |
| 4. Water Quality | 19 |
| 5. Air Quality | 20 |
| 6. Noise | 22 |
| 7. Cumulative Impacts | 24 |
| 7.1 Past, Present and Reasonably Foreseeable Actions | 25 |
| 7.2 Cumulative Analysis | 25 |
| 7.2.1 Wildlife and Habitat | 26 |
| 7.2.2 Cultural Resources | 26 |
| 7.2.4 Water Quality | 26 |
| 7.2.5 Air Quality | 27 |
| 7.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES | 28 |
| 8. References | 29 |
| 9. EA Determination and Signatures | 31 |

APPENDIX A PROJECT AREA MAPS

APPENDIX B Site Photos and FSA site Visit Report

APPENDIX C Required Permits and Plans

C-1 Storm water Pollution Prevention Plan (SWPPP), NPDES Permit and Poultry Registration

APPENDIX D Threatened and Endangered Species Documentation

D-1 IPaC Species List and Verification Letters

APPENDIX E Agency Correspondence Cultural Resources Documentation

- **E-1 National Register of Historic Places**
- E-2 Tribes With an Interest in Hempstead Co
- E-3 Section 106 Responses and Correspondence
- **E-4 Cultural Resource Survey**

APPENDIX F Wilderness Areas Supporting Documentation

- F-1 Federal Wilderness Areas
- F-2 Pond Creek Bottom Wildlife Management Area, Nearest Federal Land

APPENDIX G Wild and Scenic Rivers/ Nationwide Rivers Inventory (NRI) Supporting Documentation

APPENDIX H National Natural Landmark Supporting Documentation

APPENDIX I Wetlands Supporting Documentation

I-1 FSA 858 "Determining if a Wetland May be Present"

I-2 AD-1026

APPENDIX J Floodplain Supporting Documentation

J-1 Floodplain Map

APPENDIX K National Agricultural Statistics Service (NASS), County Extension, and Census info

APPENDIX L Notice of Availability (NOA)

ACRONYMS AND ABBREVIATIONS

ADEQ Arkansas Department of Environmental ANRC Arkansas Natural Resource Commission

AR Arkansas

ATV All-terrain vehicle

BMP's Best Management Practices

CAFO Concentrated Animal Feeding Operation

CEQ Council on Environmental Quality

CNMP Comprehensive Nutrient Management Plan

CFR Code of Federal Regulations EA Environmental Assessment

EO Executive Order

EPA Environmental Protection Agency

EQIP Environmental Quality Incentives Program FEMA Federal Emergency Management Agency

FONSI Finding of No Significant Impact

FSA Farm Service Agency
GHG Green House Gases
GPM Gallons per minute
HUC Hydrologic unit code

IPaC Information for Planning and Conservation
MA/NLAA May Affect, Not Likely to Adversely Affect

NEPA National Environmental Policy Act
NHPA National Historic Preservation Act

NLEB Northern Long Eared Bat NMP Nutrient Management Plan

NOA Notice of Availability

NPDES National Pollutant Discharge Elimination
NRCS Natural Resources Conservation Service
SHPO State Historic Preservation Officer
SPPP Stormwater Pollution Prevention Plan
THPO Tribal Historic Preservation Officers

TSP Technical Service Provider
TMDL Total Maximum Daily Load
WMA Wildlife Management Area

U.S. United States

USACE U.S. Army Corps of Engineers

USDA United States Department of Agriculture USFWS United States Fish and Wildlife Service

1. Introduction

1.1 Background

- The United States Department of Agriculture (USDA) Farm Service Agency (FSA) proposes to provide assistance for the applicant to expand an existing integrated broiler facility on a 66 acre tract of land purchased by the applicants in 2021. The 66 acre tract of land has (4) 43' x 500' broiler houses that were constructed in 2011. This proposed expansion would take place on the south side of the existing (4) house farm. The existing (4) house farm has 86,000 square feet of growing space and can accommodate 114,666 broilers per flock. The proposed (2) house expansion would add (2) 46' x 575' houses, which would equate to an additional 52,900 square feet of growing space. Each new house would hold 35,266 birds per flock. At maximum capacity, all (6) houses would be able to grow out 185,200 broilers per flock, which would meet FSA's definition of a large Confined Animal Feeding Operation (CAFO). Flock placement would be dependent on bird variety, needs of the integrator, supply and demand, and several other factors. A flock of broilers is typically kept on the farm for approximately 6-8 weeks. It is anticipated that the farm would receive approximately 4 to 6 flocks annually.
- Hempstead County is not located in the Nutrient Surplus Area. Appendices A and B contain maps and photos of the proposed project area. A detailed description of the components of the proposed project, the project site and related surrounding area of potential effect is further described in Section 2.1 of this document.

1.2 Purpose and Need for the Proposed Action

The purpose of the proposed project/action is to implement USDA, Farm Service Agency programs, to make available economic opportunity to help rural America thrive, and to promote agriculture production that better nourishes Americans and help feed others throughout the world. FSA is tasked with this mission as provided for by the Food and Security Act of 1985 as amended, the Consolidated Farm and Rural Development Act as amended, and related implementing regulations found in 7 CFR Parts 762 and 764.

The need for the proposed action is to fulfill FSA's responsibility to provide access to credit, and to help improve the stability and strength of the agricultural economy, including to start, improve, expand, transition, market, and strengthen family farming and ranching operations, and to provide viable farming opportunities for family and beginning farmers and meet the needs of small and beginning farmers, women and minorities. Specifically, in the case of this loan request, FSA's need is to respond to the applicant's request for funding to support the proposed action.

FSA Farm Loan Program Assistance is not available for commercial operations or facilities that are not family farms, or to those having the ability to qualify for commercial credit without the benefit of FSA assistance. The applicants have been determined to be a family farm as defined by 7 CFR 761.2. The proposed action would allow them the opportunity to expand their family farming operation and provide the economic stability to meet the needs of the family.

In addition, poultry integrators have a demand for new facilities such as these to provide an adequate supply for processing plants and keep them operating at an economically feasible capacity. Specialized

livestock facilities such as those proposed, have a limited useful life as they become functionally obsolete as technology advances. Accordingly, a pipeline of new facilities is necessary to insure an adequate and economical supply of low cost protein food for the nation.

1.3 Decision To Be Made

FSA's decision is whether to:

- Approve the applicant's loan request;
- Approve the request with additional mitigations; or
- Deny the loan request.

1.4 Regulatory Compliance

This Environmental Assessment is prepared to satisfy the requirements of NEPA (Public Law 91-190, 42 United States Code 4321 et seq.); its implementing regulations (40 CFR 1500-1508); and FSA implementing regulations, *Environmental Quality and Related Environmental Concerns – Compliance with the National Environmental Policy Act* (7 CFR 799). The intent of NEPA is to protect, restore, and enhance the human environment through well informed Federal decisions. A variety of laws, regulations, and Executive Orders (EO) apply to actions undertaken by Federal agencies and form the basis of the analysis.

All fifty states have enacted right-to-farm laws that seek to protect qualifying farmers and ranchers from nuisance lawsuits filed by individuals who move into a rural area where normal farming operations exist, and who later use nuisance actions to attempt to stop those ongoing operations. The Right to Farm law for Arkansas (Ark. Code Ann. § 24101) protects farming operations from nuisance claims when farms were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms employ methods or practices commonly or reasonably associated with agricultural production.

1.5 Public Involvement and Consultation

Scoping is an early and open process to involve agencies, organizations, and the public in determining the issues to be addressed in the environmental document. Among other tasks, scoping determines important issues and eliminates issues determined not to be important; identifies other permits, surveys and consultations required with other agencies; and creates a schedule that allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. Scoping is a process that seeks opinions and consultation from the interested public, affected parties, and any agency with interests or legal jurisdiction.

1.5.1 Internal Scoping

USDA staff of various specialties have been consulted regarding the purpose and need, issues and impact topics appropriate for consideration for the proposed activity.

1.5.2 External Scoping

USDA FSA has completed research and the following tasks and efforts:

- Research of U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) about the project's potential to affect federally listed species as required by the Endangered Species Act of 1973. SEE APPENDIX D.
- Consultation with the State Historic Preservation Officer (SHPO) to ensure that compliance
 with the requirements of Section 106 of the National Historic Preservation Act (NHPA) are
 met and that significant impacts to historic properties would not result from the project SEE
 APPENDIX E.
- Consultation with Tribal Historic Preservation Officers (THPO): Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Dr. Andrea Hunter of the Osage Nation, Everett Bandy of the Quapaw Tribe of Indians and Tonya Tipton of the Shawnee Tribe of Oklahoma, to ensure that compliance with the requirements of Section 106 of the NHPA are met and that significant impacts to historic properties would not result from the project. SEE APPENDIX E
- FSA staff completed Form FSA-858, "Determining if a Wetland May Be Present" to screen for wetland indicators where ground disturbance associated with project would take place SEE APPENDIX I

1.5.3 Public Involvement

The Draft EA and supporting documentation will be made available for public review and comment from 12/14/2023 through 01/15/2024 at USDA, Farm Service Agency, 300 WEST COMMERCE BLVD HOPE, AR 71801. The Draft document itself will be posted on the Arkansas FSA state website https://www.fsa.usda.gov/state-offices/Arkansas/index from 12/14/2023 to 01/15/2024. A notice of the availability of the draft EA will be published in the Hope-Prescott News on 12/14/2023 and 12/21/2023. Written comments regarding this proposal should be submitted by regular mail to USDA, Farm Service Agency, Attn: Adam Kaufman, 419 West Gaines Street, Monticello, AR 71655 as instructed by the public notice.

2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative A - Proposed Action

The proposed action involves FSA providing loan assistance to expand an existing (4) house broiler farm. Farm. The farm is located place 2.4 miles southwest of Hope, AR. This area of the state is in the Gulf Coastal Plains eco region. The proposal would take place south of the existing (4) house farm on a 5 acre tract of land the applicants are under contract to purchase from neighbors. The existing 66 acre farm has (4) 43' x 500' broiler houses. The existing (4) houses are running east and west, stacked north and south, and went into production in 2011. SEE APPENDIX A-1. There is an existing barbed wire fence that runs east and west south of the southernmost poultry house. This fence would be removed. The proposed site is currently established in pasture ground and has historically been utilized to graze beef cattle. Slopes on this proposed site range from 3 to 8 percent. SEE APPENDIX I.

The applicants would enter a contract with a poultry integrator, who would place flocks of broilers in the (2) newly proposed houses upon completion. The chicks would be grown to market size. The applicants, as growers, would be responsible for providing the equipment, utilities, and labor required to house and manage the flock including feeding, watering, brooding, waste disposal, maintaining the houses, and providing for animal welfare, sanitation, and biosecurity. The integrator would supply the chicks, feed, labor to deliver and remove the birds from the farm, veterinary services, and technical support to the grower.

The existing (4) house farm is accessible via a gravel road running east and west from highway 29 to the 66 acre farm. The proposed site south of the existing (4) house farm is established in mixed warm season grasses and various forbs. Black Branch creek (reach code: 11140201000812), which flows east to west approximately 630' south of the barbed wire fence south of the existing poultry houses. The proposed houses would lie approximately 300' north of this intermittent stream and approximately 260' north of the 100 year floodplain. SEE APPENDIX J and G. Rural residences are common in this area. There are many rural residences and subdivisions around the town of Hope along with farm and non farm businesses. The nearest neighboring residences would be located .38 miles to the east, .34 miles to the northeast, and .7 miles to the northwest of the proposed expansion site. The farm lies approximately .75 miles from HWY 174 to the west and HWY 29 to the east, and 2.6 miles SE of Interstate 30. The existing broiler farm is located 1.25 miles SW of Hope country club and .75 miles SW of facilities at the community college, U of A Hope-Texarkana. SEE APPENDIX A. Agriculture has a strong presence in southwest Arkansas. There are many integrated poultry, cattle, hay, and other livestock feeding operations in this area. According to the Hempstead County Conservation District, 144 poultry farms registered for the 2022 production year. According to NASS, Hempstead county had 51,000 head of cattle, including calves in January of 2022. SEE APPENDIX K-2.

Proposed improvements for the expansion of this existing operation would consist of (2) 46' x 575' broiler houses and related infrastructure. The design of the proposed expansion is shown on the schematic drawing as shown in APPENDIX A-4. The broiler houses would be running east and west and stacked north and south beginning 50' south of the southernmost existing 43' x 500' broiler house. There would be approximately 50' in between each of the proposed houses. The proposed structures would be built on top of earthen pads slightly larger than the dimensions of the houses themselves. The proposed structures would extend 75' further westward than the existing broiler houses. The load out

area would be extended southward approximately 150'. The load out pad would be approximately 100' wide east to west and provide space for live haul, feed trucks, and other traffic on the proposed farm to turn safely while entering the farm. The applicant uses a 9 bin compost shed located west of the existing (4) houses and also has an incinerator for mortality disposal. Our applicant would purchase an additional incinerator for the proposed expansion. The incinerator would be fueled by low sulfur diesel and would be equipped with an afterburner to help lower emissions. Incineration is an accepted method of mortality disposal per ANRC. The proposed expansion would require an additional 80 kW generator. An 8' x 12' x 30' generator shed would be built in between the proposed houses. The shed would have metal sides and a roof and would be built on top of a concrete slab. The generator would serve as a backup power supply for this proposed (2) house expansion in the event of a power outage and utilize low sulfur diesel as a fuel source, stored in a 560 gallon above ground tank. Underground wires in conduit would run from the generator and be plumbed into each poultry house. The generator would be controlled by a transfer switch. Electricity would run from existing connections on the farm.

The existing (4) house operation has a water well that is approximately 480' deep, which supplies the water demands for the farm. The existing operation also has rural water supply for a backup. The proposed expansion would require an additional water well. The proposed well would be placed west of the proposed generator shed and would be drilled to an anticipated depth of 480-500' deep. The proposed expansion would also be plumbed to have a rural water supply as a backup supply. The existing operation utilizes propane as a heat source, which is stored in above ground storage tanks. The proposed expansion would also use propane for heat.

According to the SWPPP this proposal would involve 2.4 acres of ground disturbance. SEE APPENDIX C-1. Trenches for the proposed water and underground electric lines would be dug with a ditch witch to an approximate depth of 3.5' deep.

There are no connected actions associated with this proposal at this time, however it would be possible to expand this operation in the future if the applicants were presented the opportunity to do so. Any future expansion financed with FSA funds would require a subsequent environmental review that meets the requirements of 1-EQ (revision 3).

2.2 Alternative B - No Action Alternative

The No Action Alternative means the loan would not be made and the farm described in Section 2.1 above (Proposed Action) would not be built. The applicants would continue to operate their existing (4) house farm. The current land use of the 5 acres would remain as is with no impacts as the proposed action would not go forward.

2.3 Alternative C

An alternative location would not be feasible, as the proposed project would take place on adjoining property the applicants currently own. The applicant's are under contract to purchase the 5 acres where the proposed expansion would take place. The applicant's dwelling and farming headquarters is located on the 66 acre farm. Integrators typically require a farm manager to live in close proximity to the farm. An alternative location would not be feasible from a logistical or financial standpoint and might introduce a potential nuisance into a different area.

The proposed project was designed to disturb the least amount of ground disturbance possible in an effort to maximize the amount of grazing lands available for the applicant's cattle operation, while staying within integrator setback boundaries, and taking the surrounding environment and protected resources into consideration. The proposed site is located in an open area, south of the existing (4) house operation. The proposed expansion site would not encroach on property lines or violate setback requirements from property boundaries. If the proposed site were north of the existing (4) houses, it would require taking improved pasture land out of production. The proposed site has some undesirable pasture weeds that would make it less productive for grazing cattle. Any alternative configuration of the proposal would result in greater ground disturbance than that of the proposed action.

The proposed site configuration was designed to create the least amount of ground disturbance and vegetation removal, therefore having the smallest impact on the environment and its surroundings during the construction phase of the proposal while maximizing the amount of productive grazing and hay land that would remain. Alternative configurations were not considered due to the possibility of having a greater impact on the affected environment. Integrated poultry producers must comply with very specific logistical and design requirements provided by the integrators. The applicant is under contract to purchase additional property that adjoins the existing operation. The applicant does not wish to purchase additional real estate on an alternative location to expand his farming operation.

2.4 Alternatives Considered but Eliminated From Analysis

Suitable, more feasible alternatives to the proposed action have not presented themselves. Other locations for the proposed expansion or other uses for the land in question are not considered here because such options do not meet the purpose and need for the proposed action. The applicant has applied for FSA loan assistance to fund the expansion of their existing broiler operation. FSA's decision to be made is to approve the loan for the proposed farm as designed, to deny the loan, or to approve the loan with additional mitigations, practices or methods that would be needed to minimize or eliminate impacts to protected resources.

Similarly, alternative designs of farm components are not considered as the producer's agreement with a poultry integrator requires adherence to the integrator's construction and equipment specifications, which are in place to ensure consistency, maximize production, and reduce loss. Design alternatives that would involve modification of features and infrastructure put in place by an integrator would jeopardize the availability of bird placement, be grounds for a potential loss of the contract with the integrator, and therefore the viability of the farm. Accordingly, this alternative would not warrant further consideration.

3. AFFECTED ENVIRONMENT AND IMPACTS

The impacts to a number of protected resources, as defined in FSA Handbook 1-EQ (Revision 3) Environmental Quality Programs for State and County Offices, are considered in this EA. Some resources are eliminated from detailed analysis following CEQ regulations (40 CFR 1501.7), which state that the lead agency shall identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review, narrowing the discussion of these issues in the document to a brief presentation of why they would not have a significant effect on the human or natural environment. Resources that are not eliminated are carried forward for detailed analysis. The table below shows the resources that are eliminated from detailed analysis and those carried forward. Section 3.1 contains discussions of those resources eliminated form detailed analysis. Section 3.2 describes the existing conditions for resources carried forward for detailed analysis and the anticipated impacts to those resources resulting from the Proposed Action.

| Resource | Eliminated | Carried Forward |
|-----------------------------|------------|-----------------|
| Wildlife and Habitat | | Х |
| Cultural Resources | | Х |
| Coastal Barriers | X | |
| Coastal Zones | X | |
| Wilderness Areas | X | |
| Wild and Scenic Rivers, NRI | X | |
| National Natural | Х | |
| Landmarks | | |
| Sole Source Aquifers | X | |
| Floodplains | X | |
| Wetlands | Х | |
| Soils | X | |
| Water Quality | | Х |
| Air Quality | | Х |
| Noise | | Х |
| Important Land Resources | Х | |
| Socioeconomics and | Х | |
| Environmental Justice | | |

3.1 Resources Eliminated from Detailed Analysis

Coastal Barrier Resources System

Coastal barriers are eliminated from detailed analysis as there are no designated Coastal Barriers in Arkansas.

Coastal Zone Management Areas

Coastal Zone Management Areas are eliminated from detailed analysis because there are no Coastal Zone Management Areas in Arkansas.

Wild and Scenic Rivers/NRI

Wild and Scenic Rivers/NRI were eliminated from detailed analysis in this EA. The nearest wild and scenic river in relation to the proposed project is the Cossatot River located 54 miles northwest of this proposal SEE APPENDIX G-4. Dorcheat Bayou has a nationwide rivers inventory designation located 23 miles southeast of the proposed site. SEE APPENDIX G-3. The proposal is not likely to adversely affect these (2) streams SEE APPENDIX G.

National Natural Landmarks

There are five National Natural Landmarks in Arkansas. SEE APPENDIX H-1. The site of the Proposed Action is not located in close proximity to any of these nor would the proposal threaten to alter or impair them. The closest, in proximity to this proposal Roaring Branch research natural area located 54 miles northwest of the proposed site, therefore National Natural Landmarks are eliminated from detailed analysis. SEE APPENDIX H-1

Sole Source Aquifers

Sole source aquifers are eliminated from detailed analysis because there are no sole source aquifers in Arkansas.

Floodplains

Floodplains were eliminated from further detailed analysis. According to FEMA's flood map (FLD_AR_ID: 05057C_654). The proposed site is not located within a 100 year floodplain. SEE APPENDIX J-1.

Wetlands

Wetlands have been eliminated from further detailed analysis. According to FSA Form-858 "Determining if a Wetland May Be Present," there is no hydric soil on the proposed site. The national wetlands inventory does not recognize any wetlands on the proposed site, therefore no additional screening is necessary. SEE APPENDIX I-1.

Federal Lands and Wilderness Areas

Federal Lands and Wilderness Areas were eliminated from further detailed analysis. Arkansas has 11 Wilderness areas. SEE APPENDIX F-1. The nearest in relation to the proposed broiler farm would be Caney Creek Wilderness Area, located 59.9 miles to the northwest. The nearest Federal Land would be the Lone Star Army Ammunition Plant, located 54 miles to the southwest. The proposed expansion of the existing broiler farm should have no impacts on these protected Federal Lands.

Soils

Soils are eliminated from detailed analysis because no land on this farm would not be cropped and is therefore not subject to the Highly Erodible Land provisions of the Food Security Act. Furthermore, there would be no annual tillage of the soil associated with this proposed project. The applicants have both signed AD-1026 "Highly Erodible Land Conservation and Wetland Conservation Certification." SEE APPENDIX I-1.

Important Land Resources

Prime and unique farmland, forestland and rangeland resources are eliminated from detailed analysis because the proposed action would not result in prime and/or important farmland being converted to a nonagricultural use.

Socioeconomics and Environmental Justice

No impact to population, housing, income, or employment in the region are anticipated to result from the Proposed Action, nor are disproportionate adverse impacts to minority or low income populations anticipated. Therefore, socioeconomics and environmental justice are not carried forward for detailed analysis. SEE APPENDIX K.

3.2 Resources Considered with Detailed Analysis

This section describes the environment that would be affected by implementation of the alternatives described in Chapter 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Under the no action alternative, the proposed action would not be implemented. The no action alternative would result in the continuation of the current land and resource uses in the project area. This alternative will not be evaluated further in this EA.

3.2.1 Wildlife and Habitat

Existing Conditions

The proposed 2.4 acre project site is currently established in pasture ground consisting of mixed grasses, goat weed, and other native forbs. The proposed site has historically been used to graze cattle. The existing barbed wire fence line south of the existing houses is grown up in privet hedge, various brambles and vines, and sapling sized sweet gum trees. Wildlife typical of such areas include whitetail deer, squirrels, raccoons, feral pigs, various other mammals, and birds.

An official list of threatened and endangered species and designated critical habitat for this area of Hempstead County was obtained from the US Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system. SEE APPENDIX D-1. The following threatened and endangered species are known to occur in this area of Hempstead County:

Indiana Bat Myotis sodalist (endangered), Northern Long-eared Bat Myotis septentrionalis (endangered), Tricolored Bat Perimyotis subflavus (proposed endangered), Eastern Black Rail Laterallius jamaicencsis ssp. Jamaicensis (threatened), Piping Plover Charadrius melodus (threatened), the Red Knot Calidris canutas rufa (threatened), the Alligator Snapping Turtle Macrochelys temminckii (proposed threatened), and the Monarch Butterfly Danaus plexippus (Candidate). SEE APPENDIX D-1.

The proposal would include removal of approximately 2.4 acres of cattle pasture and a fenceline. The pasture should not be considered suitable bat habitat. The fence line and saplings would be cleared during the inactive season. The proposal is not likely to adversely affect the Indiana bat and will have no affect on the Northern Long-Eared Bat. The proposed site has would not be flooded, marshy, or in a wetland area, therefore habitat for the bird species listed above does not exist. The proposed project

would have no affect on these bird species. SEE APPENDIX D-2. Effect determinations are not required for candidate or proposed threatened species.

The Bald Eagle has been known to occur in this area, however the Bald Eagle is not covered by the Endangered Species Act. No Bald Eagles, or Bald Eagle nests were observed on this proposed site during the site visit. SEE APPENDIX B-1. Affect determinations are not required for candidate or proposed threatened species.

Impacts of Proposed Action

According to the SWPPP, an estimated 2.4 acres of ground disturbance would occur to implement this proposal. SEE APPENDIX C-1. Implementation of the proposal would result in a long term loss of 2.4 acres of grasslands on the south side of an existing poultry farm. This area currently contributes to wildlife habitat. The proposal would result in a long term loss of wildlife habitat that this 2.4 acres of vegetation provided. Based on the results from the USFWS IPAC determination consultation key, and BMP's that would be implemented for this proposal, no significant impacts to Wildlife and Habitat would be expected to result from the Proposed Action. No adverse impacts on migratory birds are anticipated as a result of this proposal. The primary nesting season for birds in Arkansas is April 1 through July 15.

3.2.2 Cultural Resources

Existing Conditions

The Proposed Action involves some ground disturbing activities in areas not previously evaluated or previously disturbed to the depth required for the Proposed Action, therefore cultural resources require detailed analysis. This proposed 2.4 acre site consists of established pastureland and a fence line south of (4) existing broiler houses that were built in 2011. There are no existing improvements on the 5 acres to be purchased, with exceptions of the fence mentioned above, which serves as the property boundary. The nearest building listed on the National Register of Historic Places would be the Hope Girl Scout Little House, located 2 miles north of this proposal. SEE APPENDIX E-1. This historic site would not be visible from the proposed site, therefore the proposal should have no effect on it. Our applicants are not aware of any cultural resources in existence on the 66 acre tract of land or the 5 acres that would be purchased.

The following Indian Tribes that have an interest in this area of Hempstead county: Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Dr. Andrea Hunter of the Osage Nation, Everett Bandy of the Quapaw Tribe of Indians and Tonya Tipton of the Shawnee Tribe of Oklahoma. SEE APPENDIX E-2. FSA sent consultation letters, maps, and proposed project plans to the Arkansas State Historic Preservation Officer and Tribes listed above on 10/19/2023. Arkansas SHPO requested a cultural resource survey to be conducted for the proposal on 11/01/2023. A cultural resource survey was conducted in November of 2023. SEE APPENDIX E-4. The surface and subsurface survey of the proposed site yielded negative results for cultural resources. The firm that conducted the survey recommends that the proposed action meets the criteria for a finding of No Historic Properties Affected as per 36 CFR 800.4(d)(1). Flat Earth Archeology recommends no further archeological work for the Project Area. The cultural survey report was sent to all Tribes with an interest in this area listed above and Arkansas SHPO on 12/05/2023. FSA is awaiting responses to the consultation letters sent with the cultural survey. A response was received from the Quapaw Nation on 10/30/2023 and a response was received from the

Osage Nation to the initial consultation. The Quapaw's response states the proposed action will have no effect to known properties of cultural or sacred significance to the Quapaw Nation. If human remains or artifacts are discovered, they ask to be contacted. The Osage Response on 10/20/2023 indicates that they would be interested in any cultural resource surveys conducted for the proposal. The Osage also sent a response in regards to the survey on 12/11/2023. The Osage response states: "For direct effect, the finding of this NHPA Section 106 review is a determination of "No Properties" eligible or potentially eligible or potentially eligible for the National Register of Historic Places." The Osage wish to be contacted and for work to cease immediately should artifacts or human remains be discovered. FSA is awaiting responses from Arkansas SHPO and other Tribes with an interest in this area in regards to the cultural survey.

Impacts of Proposed Action

Based on the proximity to the Hope Girl Scout House in relation to the Proposed Action and the results from the cultural resource survey, FSA anticipates no impacts to known cultural resources would result from the Proposed Action. FSA's decision on potential effects to historic properties will not be made until the Section 106 consultation process is completed. Impacts to previously unidentified historic properties, including archaeological and historic resources, could occur during land clearing and construction activities. If such resources were encountered during construction of this proposal, all activities would cease, FSA state and national office personnel would be notified, along with Arkansas SHPO and Tribes with an interest in this area. Any potential resources discovered would be professionally evaluated for eligibility for listing on the National Register of Historic Places. No final decision on the proposed action would be made until the Section 106 process has been completed.

4. WATER QUALITY

Existing Conditions

In Arkansas, the Arkansas Department of Environmental Quality (ADEQ) has the authority to enforce provisions of the Clean Water Act that are protective of water quality and to issue permits that are protective of water quality standards. This authority is delegated to ADEQ by the Environmental Protection Agency. The ADEQ Water Division issues Stormwater National Pollutant Discharge Elimination System (NPDES) Permits to protect surface waters from contamination from runoff associated with construction. Coverage under General Permit AR1500000 is required for construction that causes ground disturbance in excess of 1 acre. Permit AR1500000 for small sites is for disturbance between 1 and 5 acres and requires operators to post required forms and documents, including a stormwater pollution prevention plan (SWPPP), on the site rather than coordinate directly with ADEQ. Permit AR 1500000 for large sites including disturbance in excess of 5 acres, required documents are submitted to ADEQ. SWPPPs are documents that describe construction activities to prevent stormwater contamination, control sedimentation and erosion, in order to prevent significant harm to surface waters and comply with the requirements of the Clean Water Act. ADEQ is also responsible for issuing Non-stormwater NPDES Permits issued to facilities that discharge water. Animal Feeding Operations and Confined Animal Feeding Operations that do not discharge into waters of the state do not require NPDES permits for ongoing operations. SEE ADEQ Reference

The Arkansas Natural Resource Commission (ANRC) Water Division is responsible for developing and implementing the Arkansas Water Plan, the state's policy for long-term water management, and for the State's Non-point Source Pollution Management Program. The Arkansas Water Plan describes each of the state's river basins. The ANRC Conservation Division supports development, management and conservation of the state's land and water resources, in part through nutrient management planning. A nutrient management plan (NMP) is a document approved by a conservation district board that assists landowners and operators in the proper management and utilization of nutrient sources for maximum soil fertility and protection of state waters. ANRC requires NMPs for farms that plan to land apply litter, sewage sludge, or commercial fertilizer within an area designated as the Nutrient Surplus Area (which includes parts of Baxter, Benton, Boone, Carrol, Crawford, Madison, Marion, Polk, Scott, Sebastian, and Washington Counties. For land application outside this area, usage of a nutrient management plan is voluntary.

The proposal is not located within a nutrient surplus area in Arkansas. SEE APPENDIX A-8. The proposed farm expansion would take place in the Black Branch-Bois d'Arc Creek watershed: (HUC12: 111402010103). This watershed is located within the Red River basin, below Fulton. According to the Arkansas water plan this basin consists of nearly 1.5 million acres of gently rolling hills and level land across 6 counties in southwest Arkansas. Land use in this basin is primarily established in forestland at 66.7%, followed by grasslands at 18.9%, cropland at 10.9%, and other land uses. REFERENCE ARKANSAS WATER PLAN. The applicant utilizes an incinerator for mortality on the existing (4) house farm and also

has a compost shed. The farm also has a litter shed. The applicants have registered with ANRC for the 2022 production year in 2023. The existing broiler farm is operating in compliance.

Impacts of Proposed Action

A SWPPP for the proposed expansion of the existing operation has been prepared. Based on the plans that have been submitted, the proposal would disturb 2.4 acres and would have automatic coverage for discharges of stormwater runoff. SEE APPENDIX C. With adherence to the best management practices described in the SWPPP, minimal impacts to surface water from the proposed construction are anticipated. The proposed farm would not discharge into waters of the state and therefore no impacts to state surface waters are anticipated. Any land application of litter produced on the farm would need to comply with ANRC requirements in order to be protective of surface water quality. REFERENCE ANRC.

The SWPPP implemented best management BMP's into the design of this proposed project to help protect water quality during the construction phase of the proposal. SEE APPENDIX C-1. The applicants have an incinerator and compost shed as a method of dead bird disposal, which is an approved method by ANRC. The applicants would purchase an additional incinerator that would handle mortality for the proposed expansion.

Integrators typically require their growers to "cake out" in between flocks, which consists of removing the top few inches of litter. Depending on integrator requirements and management practices utilized by the grower, a full house clean out is typically conducted annually, where all the litter is removed from the houses. The applicants would have the option to sell this litter and have it transported off site to another location. The applicants would be responsible for record keeping and adherence to the recommendations of a NMP if they choose to have one developed.

In summary, the existing operation is operating in compliance and the applicants have taken the necessary steps and obtained the necessary plans and permits for the proposed construction activities to take place. These proposed measures should be adequate to help prevent contamination of stormwater off site during the construction phase of this proposed farm.

No significant impacts to water quality are anticipated to result from the Proposed Action.

5. Air Quality

Existing Conditions

As of February 1, 2018, all of Arkansas is in attainment for all criteria pollutants established by the Environmental Protection Agency in compliance with the Clean Air Act. The proposed farm would not be required to obtain an air permit in accordance with Arkansas Air Pollution Control Regulation 18.301 since air emissions for defined criteria pollutants at the facility do not exceed the permitting thresholds considered protective of air quality. Potential air quality effects considered here include odor and dust production, which may be associated with construction activities and the ongoing operations of the farm. SEE REFERENCES

The site of the Proposed Action lies in rural Hempstead County where agriculture, including livestock feeding operations, are common. The existing (4) broiler houses have been in production since 2011.

There are numerous cattle and hay operations in close proximity to this existing broiler farm. According to the Hempstead County Conservation District 144 poultry farms registered for the 2022 production year. According to NASS, Hempstead county had 51,000 head of cattle, including calves in January 2022. SEE APPENDIX K-2. Woodlands account for 16% of the land use in Hempstead county. Blocks of timber and smaller patches of trees surrounding this proposal would act as a natural buffer that would filter help filter out odors, dust, and other particulate matter emitted by the proposed poultry houses. The surrounding environment could expect little changes from existing conditions in air quality. The proposal should have no adverse impacts to neighboring residences, schools, or churches.

Arkansas Water and Air Pollution Control Act, Subchapter 3 Air Pollution exempts "Agricultural operations in the growing or harvesting of crops and the raising of fowls or animals" and the "use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals." There are no local ordinances regulating odor in this area.

Impacts of Proposed Action

The existing farm has been in operation since 2011. The surrounding environment could expect minimal changes from existing conditions should the proposed expansion move forward. Construction activities that disturb the soil surface could generate dust. Such impacts would be minor, temporary and localized, generally confined to the farm property and ongoing only during construction activities. An existing load out pad would be extended and covered with gravel. The proposed site would utilize an existing stabilized entrance and exit. Exposed soils could be wet down to control fugitive dust. Similarly, during construction, minor and localized emissions associated with heavy machinery could be expected. None of these proposed construction related impacts would have a significant or long-term adverse impact to surrounding air quality.

Truck and vehicle traffic associated with the existing and neighboring poultry operations are common in this area. Dust generated form these operations would occur mostly during feed and live delivery and pickup. Humidity and misting systems inside poultry houses would keep down dust, within the barns.

Odor would be controlled through management of the poultry barns' ventilation systems, as is required by integrators for flock health. The applicants would utilize a compost shed and incinerators described in earlier sections of the EA for mortality disposal for their existing operation and proposed expansion, which is an approved method of disposal by the Arkansas Poultry and Livestock Commission. Poultry litter on the farm would be stored in the (6) broiler houses which would keep it dry and reduce the impacts of odor emitted by the litter or in the litter shed, which is located west of the existing houses. SEE APPENDIX A.

The poultry houses would be cleaned per integrator specifications between flocks as appropriate on an as-needed basis. Litter would be stored in accordance with ANRC regulations in the houses, in the litter shed, or it would be tarped in an elevated location to be kept out of the elements until it could be removed from the farm and land applied as fertilizer.

Dilution of odors is caused through the mixing of odors with ambient air and is a function of distance, topography, and meteorological conditions. Prevailing winds are from the west and would serve to facilitate the dispersion of odors. Based on the climate of the southeastern United States, there would be a few days in the year when weather conditions and humidity may cause odor to linger in the vicinity.

According to the EPA, total GHG emissions in the US in 2014 were 6,870 million metric tons of carbon dioxide equivalent (CO2e), a metric measure used compare the emissions from various greenhouses gases based upon their global warming potential. Agriculture accounted for approximately 9 percent of the total or 625.4 million metric tons. The contribution of agriculture to GHG emissions is comprised of livestock (242.96 million metric tons CO2e), crops (330.68 million metric tons CO2e), and fuel combustion (51.79 million metric tons CO2e).

Agricultural activities contribute to GHG in several ways: Management of agricultural soils accounts for over half of agriculture emissions. Activities including fertilizer application, irrigation and tillage, can lead to production and emission of nitrous oxide. Livestock, particularly cattle, produce methane as part of their digestion accounting for almost one third of the agricultural emissions. Manure storage and management also contribute methane and nitrous oxide, accounting for about 14 percent of the agricultural GHG emissions. Smaller agricultural sources include methane produced by rice cultivation and the burning of crop residue, which produces methane and nitrous oxide. Odor impacts would not be expected to be significant. Discharge fans of the existing houses point towards the west as would the fans of the (2) proposed houses.

6. Noise

Existing Conditions

Existing noise at the site of the proposed action is from routine farming operations that currently take place from the broiler farm. Noise from neighboring farms, residences, and traffic is common along the numerous gravel and paved roads that surround this farm. Existing conditions on site are generally quiet. The proposed site is currently used for grazing beef cattle. Noise from fans, tractors and equipment, vehicle traffic, and other farming and human activity does exist, but is temporary in nature. The surrounding environment would experience minimal changes from existing conditions should the proposal be allowed to continue.

Impacts of the Proposed Action

The Proposed Action would expand an existing (4) house integrated poultry operation. Noise levels would increase slightly during normal, daylight working hours during the construction phase of this project, which typically lasts about 6 months. Upon completion, noise from the Proposed Action would permanently increase noise levels in this area; however, noise from birds would be insignificant as they are contained within the poultry houses which are set back from property lines and further muffled by insulation in between the roofs, and ceilings and solid side walls within these structures and vegetative buffers to the south, east and to the west. These measures would also aid in mitigating periodic equipment usage and truck noise associated with the movement of birds, feed, supplies, and materials. Such activities would rarely take place other than during daylight hours, be infrequent in nature, of brief duration and low intensity. Similarly, noise from generators would be limited to a few minutes of periodic testing and they would only operate on a temporary basis in the event of emergencies should power be lost. As such noise would be of irregular and infrequent duration it would not be significant. Additionally, Arkansas's Right to Farm Law protects operation of farms that were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms which employ methods or practices commonly or reasonably associated with agricultural production. As

integrated poultry production is a mainstay of the state's economy the related production methods have long been the accepted prevailing practice for widespread production both in Arkansas and throughout the country. SEE ARKANSAS RIGHT TO FARM REFERENCE

The proposed action is not expected to significantly affect ambient noise levels in the area or the nearest dwelling.

7. CUMULATIVE IMPACTS

The cumulative impacts analysis is important to understanding how multiple actions in a particular time and space (e.g., geographic area) impact the environment. The CEQ regulations define cumulative effects as "...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions" (40 CFR § 1508.7). Whereas the individual impact of one project in a particular area or region may not be considered significant, numerous projects in the same area or region may cumulatively result in significant impacts.

Cumulative impacts most likely arise when a relationship exists between a proposed action and other actions occurring in a similar location or time period. Actions overlapping with or in proximity to the proposed action would be expected to have more potential for a relationship than those more geographically separated. Similarly, actions that coincide in time, may have the potential for cumulative impacts.

Establishing an appropriate scope for cumulative impacts analysis is important for producing meaningful analysis that appropriately informs agency decision making. This involves identifying geographic or temporal boundaries within which to identify other activities that could contribute to cumulative impacts to resources. Boundaries should consider ecologically and geographically relevant boundaries which sustain resources of concern. Temporal boundaries will be dependent on the length of time the effects of the proposed action are estimated to last and analysis commensurate with the project's impact on relevant past, present, and reasonably foreseeable activities within those boundaries. For example, small scale projects with minimal impacts of short duration would not likely contribute significantly to cumulative impacts. CEQ guidance (2005) reinforces this, stating:

"The scope of the cumulative impact analysis is related to the magnitude of the environmental impacts of the proposed action. Proposed actions of limited scope typically do not require as comprehensive an assessment of cumulative impacts as proposed actions that have significant environmental impacts over a large area. Proposed actions that are typically finalized with a Finding of No Significant Impact usually involve only a limited cumulative impact assessment to confirm that the effects of the proposed action do not reach a point of significant environmental impacts"

This cumulative impacts analysis focuses on the potentially affected resource (identified in section 3.2 of this document) and uses natural local boundaries to establish the geographic scope within which cumulative impacts could occur. Relevant past, present and reasonably foreseeable activities identified in Section 5.1 are based on potential geographic and temporal relationships with the proposed action within those identified boundaries. Cumulative effects on those resources are described in Section 4.2.

7.1 Past, Present and Reasonably Foreseeable Actions

Analysis of cumulative analysis is forward looking and focuses on Hempstead County where the proposed action would be implemented and the related area which includes the resources of concern. The purpose is to assess if the reasonably foreseeable effects of the proposed action would have an additive relationship to other past effects that would be significant, and to examine its relationship other actions (e.g. Federal, State, local, and private activities) that are currently taking place or are expected to take place in the reasonably foreseeable future.

Federal, State, local, and private activities that are currently taking place, have occurred in the past, or may reasonably be assumed to take place in the future in the cumulative effects area include the following: According to the 2017 Census of Agriculture, there were 613 farms in Hempstead County and 186,302 acres of established farm ground. Pastureland accounts for 52% of the land use, Woodland accounts for 16%, Cropland accounts for 28%, and 5% of the land is for other land uses. SEE APPENDIX K-1.

Poultry integrators have a finite processing capacity and have a need for new facilities, such as the proposed project, as older facilities are routinely retired due to functional obsolescence or otherwise phased out of production. As there is no foreseeable expectation that integrators would be having a significant expansion in processing capacity in the area, the quantity of bird produced in the area would remain relatively stable, even if the number of farms fluctuates.

7.2 Cumulative Analysis

Some resources considered for detailed analysis above (in Section 3.2) could be directly or indirectly affected by the Proposed Action and therefore the Proposed Action could contribute to additive or interactive cumulative effects to these resources. For other resources, no such contributions to cumulative effects are anticipated because no direct or indirect impacts would occur based on program requirements.

The significance of cumulative effects is dependent on how impacts compare with relevant thresholds, such as regulatory standards. Regulatory standards can restrict development by establishing thresholds of cumulative resource degradation (CEQ 1997):

"Government regulations and administrative standards...often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities. They also shape the manner in which a project may be operated, the amount of air or water emissions that can be released, and the limits on resource harvesting or extraction."

Cumulative effects in this analysis are described relative to regulatory standards and thresholds in accordance with CEQ guidance. FSA relies on the authority and expertise of regulatory agencies, which have broad knowledge of regional activities that could affect the sensitive resources they are responsible for protecting, and to ensure through their permitting and consultation processes that its activities are not likely to contribute to significant negative cumulative resource impacts.

7.2.1 Wildlife and Habitat

Contributions of the Proposed Action to cumulative impacts include removal of existing vegetation and the loss and fragmentation of wildlife habitat. No impacts to Threatened and Endangered Species are anticipated based on program requirements. According to the Official Endangered and Threatened Species list that was obtained for this area and the Farm Service Agency Programmatic Decision Key, the proposed project may affect, but is not likely to adversely affect threatened or endangered species in Arkansas and that no further consultation with the USFWS Arkansas Regional Field Office is necessary. Implementation of BMP's in the SWPPP for the proposal would help protect water quality in this area. The proposed site is currently utilized as pasture ground and primarily established in mixed forages. Such impacts would add to vegetation and habitat lost as a result of past, present and reasonably foreseeable activities in the region of the Proposed Action including loss of native vegetation communities to agriculture, residential and commercial development and road building, recreation and other human activities. The Proposed Action would not be anticipated to result in long term or adverse impacts or to endangered species or their habitat. No cumulative impacts are anticipated based on coordination and consultation with USFWS and program requirements.

7.2.2 Cultural Resources

Based on program requirements, which call for coordination and consultation with State and Tribal Historic Preservation Offices, no impacts to known cultural resources are expected to result from the Proposed Action. There is the potential for encountering unknown cultural resources if the proposal is implemented. Though unlikely, potential loss and damage to unknown cultural resources could occur, adding to similar potential impacts from other past, ongoing, and future developments that have the potential to degrade and destroy cultural resources. A final decision on the proposed action would not be made until the Section 106 process has been completed.

7.2.4 Water Quality

During construction of the Proposed Action there is the potential for mobilization of exposed soil; however those impacts would be temporary and minor, and minimized by adherence to terms of the SWPPP. Such impacts would add to impacts to water quality resulting from residential, municipal, industrial, and commercial development, particularly the use of septic systems, as well as runoff from roads and development, and agricultural production. Once the disturbed areas are revegetated or otherwise stabilized, no impacts to water quality would be expected. Since there are no long-terms effected to water quality, the proposed action would not be expected to contribute significantly to cumulative effects to water quality.

7.2.5 Air Quality

The Council on Environmental Quality Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change In National Environmental Policy Act Reviews states:

The site of the Proposed Action lies in a rural area outside the city limits of Hope, AR in Hempstead county. This proposed operation is surrounded by mixed timber, which would act as a buffer to filter the odor, dust, and other particulate matter emitted by the existing and proposed poultry houses. Exhaust fans would point towards the west, away from the nearest neighboring residence.

Arkansas Water and Air Pollution Control Act, Subchapter 3 Air Pollution exempts "Agricultural operations in the growing or harvesting of crops and the raising of fowls or animals" and the "use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals." There are no local ordinances regulating odor in existence is this area.

Arkansas's Right to Farm Law protects operation of farms that were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms employ methods or practices commonly or reasonably associated with agricultural production. Management of agricultural soils accounts for over half of agriculture emissions. Activities including fertilizer application, irrigation and tillage, can lead to production and emission of nitrous oxide.

- Livestock, particularly cattle, produce methane as part of their digestion accounting for almost one third of the agricultural emissions.
- Manure storage and management also contribute methane and nitrous oxide, accounting for about 14 percent of the agriculture GHG emissions.
- Smaller agricultural sources include methane produced by rice cultivation and the burning of crop residue, which produces methane and nitrous oxide.

Dust would be generated from soil disturbance and equipment usage during construction and during operation as a result of equipment use, delivery trucks, and feeding systems. Such impacts would be minor, intermittent, and localized. Though such impacts are not expected to be significant, they would add to dust generated by other activities in the immediate vicinity of the farm.

Odor impacts from the proposed action including from the barns, litter storage facility, land application of litter on the farm, though not significant, would add to other sources of odor in the area including existing cattle and poultry farms nearby.

7.2.6 Noise

Increases in noise levels would be minimal compared to existing conditions. There are no local or state noise ordinances, based on Program Requirements.

7.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

NEPA requires that environmental analysis include identification of any irreversible and irretrievable commitments of resources which would be involved should an action be implemented. The term irreversible refers to the loss of future options and commitments of resources that cannot be renewed or recovered, or can only be recovered over a long period. Irreversible commitments apply primarily to the use of nonrenewable resources, such as minerals or cultural resources, or to factors such as soil productivity, that are renewable only over a long period. Irretrievable refers to the loss of production or use of natural resources. For example, when a road is built through a forest, some, or all of the timber production from an area is lost irretrievably while an area is serving as a road. The production lost is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume timber production. No irreversible resource commitments would occur as a result of the Proposed Action. Irretrievable resources include those raw materials and fuels used during construction. List of Preparers and Persons and Agencies Contacted

| 8. List of Preparers | | |
|----------------------------|--|--|
| Name and Title | Education and Experience | |
| Adam Kaufman, | BS, Crop, Soil, and Environmental Sciences | |
| State Environmental | Years of Experience: 15 | |
| Coordinator, FSA, Arkansas | | |

| Persons and Agencies Contacted | | |
|--------------------------------|------------------------------|--|
| Name and Title | Affiliation | |
| | Landowner/Applicant | |
| | | |
| Patti Childress | Farm Service Agency | |
| Jason Floriani | Farm Service Agency | |
| Scott Kaufman | Arkansas SHPO | |
| Darin Cisco | Apache Tribe of Oklahoma | |
| Everett Bandy | Quapaw Tribe of Indians | |
| Derek Hill | Caddo Nation | |
| Autumn Gorrell | Chickasaw Nation | |
| Lindsey D. Bilyeu | Choctaw Nation of Oklahoma | |
| Linda Langley | Coushatta Tribe of Louisiana | |
| Dr. Andrea Hunter | Osage Nation | |
| Tonya Tipton | Shawnee Tribe of Oklahoma | |
| | | |

8. REFERENCES

CEQ 1997. Council on Environmental Quality (CEQ). 1997. Guidance under the National Environmental Policy Act. December.

Arkansas Water Plan:

http://www.arwaterplan.arkansas.gov/plan/ArkansasWaterPlan/AppendicesUpdate.htm

https://www.arwaterplan.arkansas.gov/basin%20reports/awp red river below fulton.pdf

National Agricultural Statistics Service (NASS):

https://www.agcensus.usda.gov/Publications/2012/Online Resources/County Profiles/Arkansas/cp0508 3.pdf:

Web Soil Survey (WSS): https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

IPAC (Information: https://ecos.fws.gov/ipac/

FEMA: https://msc.fema.gov/portal

NEPASSIST: https://www.epa.gov/nepa/nepassist

National Agricultural Statistics Service (NASS):

https://www.agcensus.usda.gov/Publications/2012/Full Report/Volume 1, Chapter 2 County Level/Ar kansas/st05 2 001 001.pdf

Arkansas Department of Environmental Quality (ADEQ), Impaired Streams/TMDL Lists:

https://www.adeq.state.ar.us/water/

https://www.adeq.state.ar.us/water/planning/integrated/303d/pdfs/2020/2020CombineCat4 & 5.pdf

Arkansas Department of Environmental Quality (ADEQ), Rules and Regulations:

https://www.adeq.state.ar.us/regs/

Arkansas Natural Resource Commission (ANRC) Regs: http://www.anrc.arkansas.gov/rules/current-rules/

Arkansas Air Pollution Control Regulations:

https://www.adeq.state.ar.us/regs/files/reg18 final 160314.pdf

Arkansas Water.Org Hempstead County:

http://arkansaswater.org//index.php?option=com_content&task=view&id=101&Item

Burns, R.T., H. Li, H. Xin, R.S. Gates, D.G. Overhults, J. Earnest, and L. Moody. 2008. Greenhouse Gas (GHG) Emissions from Broiler Houses in the Southeastern United States. Published in Proceedings of the American Society of Agricultural and Biological Engineers Agricultural and Biosystems Engineering Conference.

EPA 2016a. US Environmental Protection Agency Sources of Greenhouse Gas Emissions. Available at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#agriculture. Accessed March 1, 2017.

EPA 2016b. US Environmental Protection Agency Greenhouse Gas Data Explorer. Available at:

https://www3.epa.gov/climatechange/ghgemissions/inventoryexplorer/. Accessed March 1, 2017.

National Forest Service: https://www.fs.usda.gov/osfnf

Arkansas Air Pollution Control Regulations:

https://www.adeq.state.ar.us/regs/files/reg18 final 160314.pdf

Arkansas Right to Farm: http://www.farmlandinfo.org/sites/default/files/Arkansas RTF law 1.htm

Arkansas 2018-2023 NPS Pollution Management Plan https://static.ark.org/eeuploads/anrc/2018-2023 NPS Pollution Management Plan.compressed (2).pdf

USGS:

https://apps.nationalmap.gov/viewer/

9. EA DETERMINATION AND SIGNATURES

ENVIRONMENTAL DETERMINATION – The FSA preparer of the EA determines:

Based on an examination and review of the foregoing information and supplemental

| | □ wou Envii □ wou | ıld have a signi ronmental Imp | ficant effect pact Stateme significant eff | on the quality ent (EIS) must | oroposed action or of the human environment and an be prepared; ality of the human environment and, therefore, |
|----|---|---|---|--|---|
| 2. | | | | | or this action make the following compliance tal requirements. |
| Ī | Not in | In | Not | | |
| | compliance | compliance | applicable | | |
| | <u> </u> | | | National Envir | ronmental Policy Act |
| | <u></u> | | | Clean Air Act | |
| - | <u></u> | | | Clean Water A | |
| | <u> </u> | | | Safe Drinking | Water Act |
| | <u> </u> | | | Endangered S | |
| | | | | | er Resources Act |
| | <u> </u> | | | | Management Act |
| | <u> </u> | | | | nic Rivers Act/National Rivers Inventory |
| | <u> </u> | | | National Histo | oric Preservation Act |
| | I | | | _ | ghly Erodible Land Conservation, and Subtitle C, |
| | <u></u> | | | Wetland Cons | servation, of the Food Security Act |
| | <u> </u> | | | Executive Ord | ler 11988 and 13690, Floodplain Management |
| | <u> </u> | | | Executive Ord | ler 11990, Protection of Wetlands |
| | | | Farmland Protection Policy Act | | |
| | <u> </u> | | | Department R | Regulation 9500-3, Land Use Policy |
| | I | | | E.O. 12898, Er | nvironmental Justice |
| 3. | environn consister protection consider | mental impacts ncy with FSA e on, and have co ration of these Be approved w Impact (FONSI) Not be approve | s identified benvironmental onsidered the factors, fron vithout further prepared. | by this assessmal policies, par ne potential be m an environm ner environme | egrees (context and intensity) of adverse nent. I have also analyzed the proposal for its rticularly those related to important farmland enefits of the proposed action. Based upon a nental standpoint, this project may: ntal analysis and a Finding of No Significant identified under item b. |
| | | | | | |
| N | lame and Title | of Preparer (p | print) | | |

1.

Environmental Determination – FSA State Environmental Coordinator determines:

| Based on my review of the foregoing Environmental Ass I have determined: | essment and related supporting documentation, |
|---|---|
| The appropriate level of environmental review substantiates a Finding of No Significant Impact and processing of the requested action may cor FONSI will be prepared. | - |
| ☐ The Environmental Assessment is not adequate the following reason(s): | and further analysis or action is necessary for |
| ☐ The Environmental Assessment has established following reason(s): | the proposed action cannot be approved for the |
| Additional SEC Comments: | |
| | |
| Signature of SEC | Date |
| Printed Name | |