U.S. DEPARTMENT OF AGRICULTURE
Farm Service Agency

FINAL ENVIRONMENTAL ASSESSMENT

Proposed Swine Barn Construction at:

Kilbourne, Illinois (IL) 62655
(Mason County)

Prepared By

John W. Gehrke

State Environmental Coordinator

September 16, 2021

COVER SHEET

Proposed Action:	The Farm Service Agency (FSA) of the United States Department of Agriculture has received an application for participation financing for the construction of a single 193'x 101' swine building with a 10' deep pit for manure storage. The Area of Potential Effect (APE) is approximately .7 acres to be constructed in the NW ¼ of the NE ¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, in Mason County. IL
Type of Document:	This is a site-specific Environmental Assessment
Lead Agency:	United States Department of Agriculture, Farm Service Agency
Cooperating Agencies:	None
Further Information:	John W. Gehrke, Farm Loan Chief at (217) 331-6873, john.gehrke@usda.gov
Comments:	This FINAL Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (40 CFR 1500-1508/42 US Code 4321-4347), as amended, and FSA implementing procedures found in 7 CFR 799, as well as Public law 91-140, 42 US Code 4321-4347, as amended. Written comments on the Draft EA were accepted until July 30, 2021. A total of 33 written comments were received and are included in Appendix O.

TABLE OF CONTENTS

APPENDICES

Acronyms and Abbreviations

NEPA	National Environmental Policy Act
NITC	Notice of Intent to Construct
IEPA	Illinois Environmental Protection Agency
IDOA	Illinois Department of Agriculture
SEC	State Environmental Coordinator
LMFA	Livestock Management Facilities Act
SHPO	State Historic Preservation Officer

1.0 INTRODUCTION

1.1 Background

The Farm Service Agency (FSA) of the United States Department of Agriculture (USDA) is considering loan assistance for the construction of a 2400 head wean-to-finish swine Animal Feeding Operation (AFO) in the NW ¼ of the NE ¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, in Mason County, IL. The operation would consist of a single 193'x 101' new swine building with a 10' deep pit for manure storage. The barn would have a maximum operating capacity of 2400 hogs and is classified as a medium-sized AFO. The total area affected by construction would measure approximately .7 acres. The improvements include a four-bay compost facility with a sloped concrete floor, concrete walls, and a roof.

The proposed site is about seven miles southeast of Havana, IL and five miles northeast of Kilbourne, IL. There are approximately three homes within one-half mile of the site, and the nearest home is approximately 2,030 feet north of the site. The surrounding topography is mostly flat and falls within the Jordan Creek watershed. The region is dominated by agricultural cropland, which accounts for most of the surrounding land use. The site is currently bare ground and lies in a west-to-east orientation, bounded by an approximate 10-acre tract of woods to the southwest and irrigated cropland in all other directions.

Prior to completion of this Environmental Assessment (EA), the applicant submitted a Notice of Intent to Construct to the IL Department of Agriculture. Because of the limited size of the proposed operation, and classification as a medium AFO, with no discharge to surface waters, the IL EPA was consulted and neither a Nutrient Management Plan nor a National Pollutant Discharge Elimination System (NPDES) permit were required. FSA has completed consultation with EPA Region 5 regarding potential impacts to the Mahomet sole source aquifer beneath the proposed site.

1.2 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to provide Federal assistance for the construction of a new swine operation, including a wean-to-finish barn and below-building manure storage. This project falls within FSA's mission to implement programs to make economic opportunity available supporting rural Americans. FSA is tasked with this mission as provided by the Food and Security Act of 1985 as amended, and the Consolidated Farm and Rural Development Act as amended, and the relating implementing regulations found in 7 CFR parts 762 and 764. FSA is mandated to provide access to credit, and to help improve the strength and stability of the agriculture economy.

The need for the action is to fulfill FSA's responsibility to consider applications for Farm Loan Programs; to assist beginning and family size farmers to acquire, enlarge, improve, or expand their farming operations. Specifically, in this case, FSA's need is to respond to the applicant's request for funding to support the proposed action.

In addition, swine integrators have a demand for new facilities to provide an adequate supply for processing plants and keep them operating at an economically feasible capacity. Specialized livestock facilities have a limited useful life and they become functionally obsolete, in part, due to technological

advances and physical obsolesces. New facilities are necessary to ensure an adequate and economical supply of low-cost protein food for the nation and the world.

1.3 Decision To be Made

The Agency must determine to:

- Approve the applicant's loan request
- Approve the request with mitigation; or
- Deny the loan request

1.4 Regulatory Compliance

This EA 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 (EOs) apply to actions undertaken by Federal agencies and form the basis of the analysis.

1.4.1 Right to Farm

All 50 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 Illinois include the following protections:

(740 ILCS 70/0.01) (from Ch. 5, par. 1100) Sec. 0.01. Short title. This Act may be cited as the Farm Nuisance Suit Act (Source: P.A. 86 1324.)

(740 ILCS 70/1) (from Ch. 5, par. 1101) Sec. 1. It is the declared policy of the state to conserve and protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. When nonagricultural land uses extend into agricultural areas, farms often become the subject of nuisance suits. As a result, farms are sometimes forced to cease operations. Many others are discouraged from making investments in farm improvements. It is the purpose of this Act to reduce the loss to the State of its agricultural resources by limiting the circumstances under which farming operations may be deemed to be a nuisance. (Source: P.A. 82 509.)

(740 ILCS 70/2) (from Ch. 5, par. 1102) Sec. 2. The term "farm" as used in this Act means any parcel of land used for the growing and harvesting of crops; for the feeding, breeding and management of livestock; for dairying or for any other agricultural or horticultural use or combination thereof. (Source: P.A. 82 509.)

(740 ILCS 70/3) (from Ch. 5, par. 1103) Sec. 3. No farm or any of its appurtenances shall be or become a private or public nuisance because of any changed conditions in the surrounding area occurring after the farm has been in operation for more than one year, when such farm was not a nuisance at the time it began operation, provided, that the provisions of this Section shall not apply whenever a nuisance

results from the negligent or improper operation of any farm or its appurtenances. (Source: P.A. 82 509.)

(740 ILCS 70/4) (from Ch. 5, par. 1104) Sec. 4. The provisions of Section 3 of this Act shall not affect or defeat the right of any person, firm, or corporation to recover damages for any injuries or damages sustained by them on account of any pollution of, or change in condition of, the waters of any stream or on the account of any overflow of lands of any such person, firm, or corporation. (Source: P.A. 82 509.)

(740 ILCS 70/4.5) Sec. 4.5. Costs and fees. In any nuisance action in which a farming operation is alleged to be a nuisance, a prevailing defendant shall recover the aggregate amount of costs and expenses determined by the court to have been reasonably incurred in the defense of the nuisance action, together with a reasonable amount for attorney fees. For the purposes of this Section, a prevailing defendant is a defendant in a lawsuit in whose favor a final court order or judgment is rendered. A defendant shall not be considered to have prevailed if, prior to a final court order or judgment, he or she enters into a negotiated settlement agreement or takes any corrective or other action that renders unnecessary a final court order or judgment. (Source: P.A. 89 256, eff. 1 1 96.)

(740 ILCS 70/5) (from Ch. 5, par. 1105) Sec. 5. This Act does not affect actions commenced prior to the effective date of this Act. (Source: P.A. 82 509.)

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.

A notice of the availability (NOA) of the Draft EA was published in the Havana Democrat on June 9th and 16th, 2021. The Draft EA was made available by request to FSA for public review and comments were accepted in excess of 30 days: June 9th, 2021 to July 30th, 2021. A total of 33 comments were received and are summarized in Appendix N.

1.5.1 Internal Scoping

USDA Farm Production and Conservation (FPAC) staff of various specialties are available for consultation regarding the purpose and need, issues and impact topics appropriate for consideration for the proposed activity. A site visit and pedestrian review was completed by John Gehrke, Farm Loan Chief and State FSA Environmental Coordinator (SEC) on May 14, 2021. During the visit no concerns were noted (Appendix B).

1.5.2 External Scoping and Agency Consultation

USDA undertook the following efforts and research to aid in determining the potential impacts of the proposed action:

- Researched the U.S. Fish and Wildlife Service (USFWS) - Information, Planning, and Conservation System (IPaC) about the project's potential to affect federally listed species. No critical habitat is located in the area of potential effect (APE). A review of the project has been completed relative to the potential species presence as required by the Endangered Species Act (ESA) of 1973.
- Consulted with the State Historic Preservation Officer (SHPO) to ensure the requirements of 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act (NHPA)) were properly addressed. Compliance documents are included.
- NRCS records were reviewed to ensure no known wetlands would be affected. This included a review of wetland delineations of area meeting the three mandatory criteria of wetlands in accordance with the procedures of the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (Y-87-1) and supplements. This review was to determine the absence, presence, and extent of wetlands and waters of the United States relative to Section 404 of the Clean Water Act. A certified wetland determination was completed by NRCS and the records made part of this document.
- Although no Federally recognized tribes have a contact located in Illinois, the Tribal Directory Assessment Information HUD site was used to contact the tribes with interests in Illinois.
- Consulted with the IL EPA regarding the requirement for Comprehensive Nutrient Management Plans (CNMP) and National Pollution Eliminations Discharge (NPDES) permits. Neither of these are required in Illinois for a medium size AFO.
- Consulted with Environmental Protection Agency (EPA) Region 5 Sole Source Aquifer Program staff. This consultation is required for any Federal project with the potential to affect a sole source aquifer, such as the Mahomet Sole Source Aquifer.

2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

FSA is considering a loan application to finance the construction of a wean-finish facility in the NW ¼ of the NE ¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, in Mason County, IL. The operation will consist of a single 193' x 101' new swine building with a 10' deep pit (8' underground) for manure storage. The barn will have a maximum permitted operating capacity of 2400 hogs. The total area affected by construction would measure approximately .7 acres. The latitude and longitude of the proposed site are: 40.216810°, -89.985379°.

2.2 No Action Alternative

The no action alternative means the proposed swine facility would not be built. This would result in the continuation of existing conditions on the proposed site and no changes to the existing environment would occur. The site would remain vacant land.

2.3 Alternative Locations

Selecting an alternative location would consist of moving the proposed project to a different site within the property boundaries or to another parcel of land. Relocating the project would not offer environmental benefits and likely have a greater impact on the affected environment. Construction of the barn at the proposed location would be compliant with all applicable laws and regulations. The applicant has secured access to the land selected for the proposed barn. It may not be possible for the applicant to secure access to another location that meets the criteria for the proposed project. If the applicant were to select an alternative site, they could incur additional costs and delay. A change to the site location may also result in additional environmental impacts since the proposed site is vacant land with limited sensitive environmental resources present. Mitigation measures for protection of the Mahomet Sole Source Aquifer have been incorporated into the project. This location also provides ready access to family owned or controlled farm real estate, allowing for manure use as fertilizer and requiring less transportation. This alternative offers no benefit and is not feasible.

2.4 Alternatives Considered but Eliminated from Analysis

Other locations for the farm or other uses for the land in question are not considered because such options do not meet the purpose and need for the proposed action and may result in additional environmental impacts. The applicant has applied for assistance for the proposed construction of a new medium AFO. FSA's options are to approve the loans for the proposed farms as designed, to deny the loan, or to approve the loan with additional mitigation, 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 swine 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 features and infrastructure put in place by an integrator would jeopardize the availability of livestock placement, be grounds for a potential loss of the contract with the integrator, and therefore the viability of the project. Accordingly, this alternative would not warrant

further consideration. The designs were completed by a Licensed Professional Engineer and have been determined compliant with State of Illinois regulations. All design modifications and best management practices required by EPA Region 5 have been incorporated for protection of the Mahomet Sole Source Aquifer and to ensure water quality impacts are avoided and minimized.

3. AFFECTED ENVIRONMENT AND IMPACTS

The impacts to several 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 1501.9(f)(1)), 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	x	
Cultural Resources	x	
Coastal Barriers	x	
Coastal Zones	x	
Wilderness Areas	x	
Wild and Scenic Rivers, NRI	x	
National Natural Landmarks	x	
Sole Source Aquifers		x
Floodplains	x	
Wetlands	x	
Soils	x	
Water Quality		x
Air Quality		x
Noise	x	
Important Land Resources	x	
Socioeconomics and Environmental Justice	x	

3.1 Resources Eliminated from Detailed Analysis

3.1.1 Wildlife and Habitat

A site visit was conducted by FSA staff on May 14, 2021. During the site visit, it was observed that the site consists of introduced grasses and has been previously disturbed. The USFWS IPaC system was used to obtain an official species list for the APE. This official species list included the Indiana bat (endangered), northern long-eared bat (threatened), and the monarch butterfly (candidate) that are

known to reside within the county. IPaC also identified the decurrent false aster (threatened) and eastern prairie fringed orchid (threatened) as listed plant species within the county. The official species list did not indicate the presence of any critical habitat within the APE.

The effects to wildlife and habitat were eliminated from detailed analysis because the proposed action would not affect any suitable habitat for any of the listed species. Summer habitat of both bat species includes loose-barked trees that provide tight crevices for cover. Caves and mines typically serve as hibernacula for both bat species in the winter. This project would not require the removal of any trees or involve the disturbance of any caves or mines. The site is previously disturbed with introduced grasses as the primary ground cover. Therefore, FSA determined that the proposed action would have ***no effect*** to any threatened or endangered species (Appendix D).

3.1.2 Cultural Resources

The existing project area consists of cleared farmlands and introduced grasses. There are no buildings on the immediate project APE. Based on the specific characteristics of the proposed project acreage and the fact that no archaeological resources are known or suspected to be present in the area, this project does not require a cultural resources inventory. The project has been reviewed by the SHPO archaeologist (Appendix E) overseeing that region and they found that the probability of finding intact, significant archaeological resources that would be adversely impacted by the undertaking low.

No specifics about traditional cultural properties are known for the project area. However, consultation with nine Tribes that have a vested interest in the project area was initiated on May 7, 2021. The Agency did not receive a response offering any additional information or a request to enter formal consultation regarding the proposed project. The request for information was closed on June 7, 2021.

Effects to archeological and cultural resources were eliminated from further analysis based on the specific characteristics of the proposed project area and the acreage to be used for construction. There are no archaeological resources present in the project area there is no potential to effect cultural resources. (Appendix E)

3.1.3 Coastal Barriers and Coastal Zones

Considering the distance from coastal barrier system resources and coastal zone management areas to the project site in Mason County, IL, effects to coastal resources were eliminated from detailed analysis. (Appendix F & G)

3.1.4 Wilderness Areas

Effects to wilderness areas were eliminated from detailed analysis.

The nearest wilderness area is Crab Orchard Wilderness, it is located a considerable distance (approximately 240 miles) from the project location and will not be impacted. Considering the distance from the project location and the viewshed of the Crab Orchard Wilderness area, FSA has determined that there will be no impacts to wilderness areas (Appendix H).

3.1.5 Wild and Scenic Rivers/Nationwide Rivers Inventory (NRI)

Effects to Wild and Scenic Rivers/National Rivers Inventory were eliminated from detailed analysis.

The Vermillion River is the nearest river found on the National Rivers Inventory or Wild and Scenic Rivers System and is approximately 140 miles from the project site. Considering the distance from the project location and the non-discharge nature of the project, FSA has determined there will be no impacts to Wild and Scenic or NRI rivers (Appendix I).

3.1.6 National Natural Landmarks

Effects to national natural landmarks were eliminated from detailed analysis.

The nearest national landmark is Funks Grove Nature Preserve in McLean County, and is located approximately 60 miles from the project location. The landmark will not be impacted by this project (Appendix J).

3.1.7 Floodplains

Effects to floodplains were eliminated from further analysis.

The site is situated within upland elevations (518 feet amsl) of the Jordan Creek watershed mapped on Panel 17125C0325D of the Flood Insurance Rate Map (FIRM). The closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. There are no floodplains within or in the vicinity of the site or mapped special flood hazard areas that would be impacted by the project (Appendix L).

3.1.8 Wetlands

Effects to wetlands were eliminated from further analysis.

The site is situated within upland elevations (518 feet amsl) of the Jordan Creek watershed. There are no wetlands mapped on the National Wetland Inventory, floodplains, and the closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. Soils are not hydric and are classified as Plainfield sand, 1 to 7 percent slopes, which are found on summits or upland landscapes. Furthermore, the NRCS has delineated wetlands at the site with no findings (Appendix M). During the site visit conducted on May 14, 2021, there were no stream or wetland features observed.

3.1.9 Soils

Effects to soils were eliminated from detailed analysis.

Effects to soils were eliminated from detailed analysis because NRCS has determined that all soils found on the site are prime or are of statewide importance (Appendix N). The primary soil classification of the site includes Plainfield sand, 1 to 7 percent slopes. These soils are well drained, not highly erodible, and construction and post construction plans, detail soil stabilization and control measures.

3.1.10 Noise

Effects on noise were eliminated from detailed analysis.

The State of Illinois has specific noise regulations found in 20 ILCS 3515/2. Section 901.107 contains exemptions which include construction and some farming practices. These regulations in 625 ILCS 5/12-602.1, Sec. 12-602.1. Excessive engine braking noise signs, allows a county or municipality to post signs that prohibit the driver of a commercial vehicle, as defined in Section 1-111.8 of this Code, from operating or actuating any engine braking system that emits excessive noise.

The arrival, operation and departure of feed trucks, loading trucks, and clean out equipment contribute to noise levels outside the barn. Unattended alarms which go off due to the poor farm management can be another source of annoyance to neighbors. (Paulson, 1999)." Based upon the research reported in this article the noise at the boundary of the land should not exceed the legal limits or be annoying to the neighbors.

Effects on noise; 1) will not create noise that will interfere with communication, 2) is intense enough to damage hearing, or 3) is otherwise annoying. The increase in noise level during construction would be temporary, resulting from operation of heavy equipment during normal hours. Construction of a facility of this size would typically take six months from start to finish.

Once the facility is operational, truck traffic servicing the facility would occur infrequently during normal daylight working hours. Hog collection, new placement, and feed delivery requires occasional truck and equipment operation during the evening and early morning hours. The farm's backup generators would only be in operation during a power outage or for routine testing and due to the remote nature of the operations and the surrounding trees it is unlikely that the Illinois State Regulations regarding noise would be exceeded. The production area is more than 1,000 feet from the closest neighboring residence. By virtue of the specific site plan that calls for the placement to be removed from residences, the Agency has determined that there will be no significant effect on noise.

3.1.11 Important Land Resources

Effects to land resources were eliminated from detailed analysis.

The soils in the project area are all considered prime farmland and/or farmland of statewide importance. Since the proposed project involves construction of a swine facility which qualifies as an on-farm structure necessary for the farm operation, it is exempt from the farmland provisions of the Farmland Protection Policy Act, NRCS's Implementation Rule, and Departmental Regulations/Land Use Policy. Considering the exemption, FSA has determined that there will be no effect to important land resources.

3.1.12 Socioeconomic Impacts and Environmental Justice

The proposed action will not cause any adverse human health or environmental effects as defined in Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and

Low-Income Populations". The proposed project is in Mason County Illinois. The area has historically been utilized for swine production.

The US Environmental Protection Agency's (EPA) Environmental Justice screening tool was reviewed for this location considering the area with in one mile of the project site, Appendix N. The block group that the project is located within is comprised of the following populations.

Group	Block Group Percentage	State Percentage
Minority Population	9%	38%
Low Income Population	41%	29%

Based on the review, the project area does not contain a disproportion population of minority or low-income groups when compared to the state percentage.

The proposed action will occur on a site that is currently in farm production. The construction of the proposed project will not affect the nature of the site or surrounding area. The project is not expected to impact air quality, water quality, or existing noise conditions for the surrounding residences. Delivery trucks are already common in this area and the additional service trucks for this one farm will likely not be noticeable, and nearby residences will not be affected. The project will not impact minority or low-income populations, nor will it have a negative impact on the socioeconomic conditions of the area. The siting of the barns has been reviewed in accordance with local and state laws and all setbacks have been met.

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 protected 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 resources uses in the project area.

3.2.1 Sole Source Aquifers

The Safe Drinking Water Act gives EPA authority to designate all or part of an aquifer as a "sole source" if contamination of the aquifer would create a significant hazard to public health and there are no physically available or economically feasible alternative sources of drinking water to serve the population that relies on the aquifer. The designation authorizes EPA review of projects that receive Federal financial assistance to assess potential for contamination of the aquifer system that would create a significant hazard to public health. EPA defines a sole source aquifer as one where:

- The aquifer supplies at least 50 percent of the drinking water for its service area, and
- There are no reasonably available alternative drinking water sources should the aquifer become contaminated.

The proposed barn and manure application sites lie within the Mahomet Sole Source Aquifer (the aquifer) recharge zone. The Mahomet Aquifer system is an underground layer of water-bearing sand and gravel that fills a wide bedrock valley in an area that includes 14 east-central Illinois counties,

including Mason County. The Aquifer provides about 58 million gallons of drinking water each day for 120 public water systems and thousands of rural wells that serve about a half million people in Illinois.

The Mahomet aquifer consists of sand and gravel deposited during the pre-Illinois Glacial Episode by meltwater flowing westward along the Mahomet Bedrock Valley. The aquifer trends east-to-west across east central Illinois in a broad arc. The aquifer is under confined conditions; however, at its western extent in Mason County it becomes unconfined. Depth to groundwater in the vicinity of the site typically ranges from 78 to 228 feet. Groundwater is pumped from the Mahomet aquifer to meet the water-supply needs of rural domestic, municipal, industrial, agricultural, and commercial users.

3.2.2 Impacts of the Proposed Action

Considering the sensitive nature of the Mahomet Aquifer, FSA consulted directly with EPA Region 5 staff responsible for the Sole Source Aquifer Program. FSA identified the proposed barn and manure application site to support EPA analysis. Furthermore, FSA provided details regarding the design of the proposed barn and swine operation.

USDA entered consultation with EPA and on August 12, 2021. Consultation was completed with issuance of a letter requiring specific Best Management Practices that must be implemented. EPA's concerns were similar to some of the public comments. The concerns identified were the possibility pathogens (e.g., coliform bacteria) and other contaminants (e.g., nitrate), which can leach and contaminate groundwater. Additionally, EPA identified a vulnerability to the aquifer in this area due to the lack of a protective clay confining layer. Areas with sandy soils, such as the area in Mason County in which the proposed barn and land application sites are to be located, are particularly vulnerable. The EPA required that the operation must be designed, constructed, and operated so as to minimize non-point source pollution entering groundwater. To that end EPA provided a list of requirements and recommendations for the operation listed below.

- A registered professional engineer should certify the construction of the manure storage facility (concrete pit) and the mortality management and composting areas, to minimize leaching or discharge of liquids to the groundwater. Prior to this certification, the applicant must inform the engineer that the location is within an EPA-designated Sole Source Aquifer. The design certification has been provided in accordance with state requirements intended to prevent seepage or groundwater contamination (e.g., 8 IAC 900.502(c); 510 ILCS 77/13(b)(3); and 35 IAC 501.402(g)).

- We strongly recommend the owner/operator (or designee) complete periodic inspections of the concrete floor and walls of the manure management facility, such as each time the manure is emptied for land application. Additionally, pump-outs should be inspected periodically to ensure covers are intact, so as to prevent inflow of rainwater and ensure adequate freeboard is maintained to prevent manure overflow.

- We understand that perimeter foundation drains monitoring (e.g., for nitrate-N, phosphate-P, chloride, sulfate, ammonia-N) will be required by the State of Illinois upon initiation of the project and strongly recommend that such monitoring be continued periodically as long as the facility is in operation. Ongoing perimeter foundation drain monitoring is recommended to help identify, and quickly mitigate, any animal waste impacts to groundwater as the barn and

foundations age (e.g., if cracks develop in the concrete or the water stop material). We note that the plans call for water from the perimeter foundation drain to be gravity-drained or pumped to daylight; the owner/operator or designee should periodically inspect the foundation drain receiving outlet for animal waste impacts.

- The owner/operator should notify the State regarding any indication of manure or animal waste release to groundwater (510 ILCS 77/18).

- Any pre-application staging of manure outside of the manure waste management system (concrete pit) should be limited to very short durations and only within areas that will limit seepage into groundwater (e.g., concrete pad) and that will limit stormwater run-off or run-on (e.g., berms / covers). Likewise, mortality management compost, which is planned to be on an inwardly sloped concrete pad with a cover to prevent stormwater influx, should be properly managed so that contaminants will not leach into groundwater.

- The applicant should inform any other parties (including contractors and landowners) who accept, handle, or transport the manure from the facility that the area is underlain by sensitive groundwater (the Mahomet SSA).

- The applicant should not land apply (including by injection and incorporation methods) manure during rainfall (35 IAC 560.207) or when the ground is saturated, frozen, or snow-covered (35 IAC 560.206) at any site above the Mahomet SSA.

- The applicant should land apply manure as close to planting time as possible, i.e., in the spring or, if a cover crop will be planted, in early fall – when a crop that will use the nutrients is planted. Based on the storage capacity described in the facility's application (12 months), this should be achievable. Planting of fall/winter cover crops should be encouraged.

- When conditions allow (i.e., not saturated, frozen, or snow-covered AND when a crop will be present), land application of manure should target the root zone and enhance plant uptake and reduce losses (e.g., run-off, vapors, and leaching to groundwater).6 The owner / operator or designee should consider using slower application speeds, split applications, and injection equipment which have been reported to reduce nutrient leaching to below the root zone.

- A comprehensive Nutrient Management Plan (NMP) should be maintained and implemented (e.g., soil characteristics, manure and soil nutrient testing, crop rotations, and manure application records) for each land application site above the Mahomet SSA. We understand that the State of Illinois does not require NMP for operations with less than 1000 animal units, but voluntarily complying with requirements for large operations (e.g., 8 IAC 900 Subpart H) is strongly recommended to protect the sensitive groundwater in this area. We understand the applicant, with assistance from experienced professionals, intends to develop their nutrient management plan during the first year following construction.

- Application rates should be limited based on the results of nitrogen leaching risk assessment(s), in addition to the requirements in 8 IAC 900.801 and 510 ILCS 77/20. A nitrogen leaching assessment should be completed for each land application field over the Mahomet SSA to determine the amount of nitrogen that the soil can handle at different times of the year to

ensure protection of the SSA. Other sources that contribute nitrogen and phosphorus to the soil (e.g., crop rotation, other fertilizers) should be considered, and realistic yield goals should be used.

- For any tiled fields, the applicant should apply manure only when the soil is relatively dry. Managing drainage water by raising drain outlets before manure application is also recommended to reduce transport of contaminants.

- For irrigated fields, good water management is needed to prevent excessive leaching of soluble nutrients such as nitrate, and any additional irrigation to leach salts from soils should be timed to minimize the leaching of nitrates.

- Periodic groundwater monitoring is recommended (such as at the on-site irrigation well as described below), so that the owner(s) and operator(s) can implement corrective actions if any impacts, such as increasing contaminants (e.g., nitrates, nitrites, coliform bacteria), are observed in groundwater downgradient of the sites where manure is land applied.

- When a well is no longer needed, it must be properly sealed.

- The applicant should confirm all areas where manure will be produced, handled, or stored are at a lower elevation than the water well location(s), or provide for other means (e.g., raised casing, berms) to prevent contaminated run-off from contaminating the well.

- Periodic sampling of the water well is recommended to evaluate groundwater quality (e.g., nitrates, nitrites, coliform bacteria).

The EPA determined that if Best Management Practices such as the one's above are implemented that the project is not likely to contaminate the Mahomet Sole Source Aquifer. USDA discussed the Best Management Practices sited above with the applicant and he is implementing each measure in his plan, including the development of a Nutrient Management Plan that will account for all waste, mortality, application, and safety measures to be implemented to protect the Mahomet Sole Source Aquifer.

3.2.3 Impacts of the No Action

If the Proposed Action is not implemented, then the existing conditions of the Mahomet Aquifer at the site would continue and no impacts would occur.

3.2.4 Water Quality

Construction of the swine confinement building, and manure containment would be on an approximate .7 acre tract located at NW ¼ of the NE ¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, in Mason County, IL. The project is sited in an approximate six-acre catchment in an upland location in the Jordan Creek watershed (HUC 071300030801). As noted above, the site falls within the Mahomet Aquifer recharge zone. There are no mapped tributaries or open water bodies within 1-mile of the

project site (Appendix K). The nearest tributary is a channelized ditch approximately one mile southeast of the project site.

3.2.5 Impacts of the Proposed Action

The proposed swine operation would have a maximum operation of 2,400 hogs and is designated as a medium-sized AFO. Due to the limited size of the operation and that there will be no discharge to surface waters, there are no specific NPDES or CNMP requirements for this project. The site is located in the uplands and far removed, over one-mile, from any surface water resources. Manure would be reused as fertilizer for plant uptake and injected directly into cropland at approved agronomic rates properly managed by the owner and the commercial custom applicator.

In accordance with the site plan, all waste generated will be directed to under floor pits that shall be composed entirely of wastewater. All waste will be stored in the pit until applied to fields. The capacity of the waste pit is more than one year of production. The design certification has been provided in accordance with state requirements intended to prevent seepage or groundwater contamination (e.g., 8 IAC 900.502(c); 510 ILCS 77/13(b)(3); and 35 IAC 501.402(g)). This concrete pit was designed by structural engineers who specifically designed it with reinforced concrete meeting the needs of this sensitive area where the aquifer is 60-80 feet below the surface.

Within the first six months of production, prior to any application of waste to fields, a Nutrient Management Plan (NMP) will be developed for this operation. An NMP is a detailed planning document that identifies conservation practices and management activities that, when implemented, help to ensure that both production and natural resource protection goals are achieved. The objective of an NMP is to document those practices and activities that will help achieve the goals of the producer and protect or improve water quality. This operation is a medium CAFO and has ample land available to utilize all nutrient produced. Most of the terms of the NMP are already include in the plan by virtue of state law and mitigation required by EPA during the consultation process.

Nutrient Management Plans include a minimum of nine terms:

- **Adequate storage capacity** – must have, at a minimum, sufficient storage capacity to ensure that the production area is designed constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event. *This project has been designed with a covered 10-foot pit which is designed to hold over one year of production. The underfloor design eliminates the precipitation risk. At the site the aquifer is 60-80 feet below the surface. The State of Illinois requires lagoon design based on the distance from the lagoon bottom to an aquifer. This distance determines whether a liner and groundwater monitoring system are needed. Facilities at which monitoring wells are required (those with an aquifer within 20 feet of the lagoon bottom) must test water samples periodically for a variety of contaminants.*

- **Mortality management** – Managing mortalities to ensure that they are not disposed of in a liquid manure, stormwater, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities. *Mortality management will be accomplished through composting, which is planned to be on an inwardly sloped concrete*

pad with a cover to prevent stormwater influx, will be properly managed so that contaminants will not leach into groundwater.

- **Divert clean water** - Ensuring that clean water is diverted, as appropriate, from the production area. *The plans call for water from the perimeter foundation drain to be gravity-drained or pumped to daylight; the owner/operator or designee will periodically inspect the foundation drain receiving outlet for animal waste impacts. Additionally, there are state requirements for monitory to ensure no waste is found in the drain water leaving the facility.*

- **Prevent direct contact with waters of the U.S.-** *This site is ideally located to avoid contact with waters of the U.S. The site is situated within upland elevations (518 feet above mean sea level) of the Jordan Creek watershed. There are no wetlands mapped on the National Wetland Inventory, floodplains, and the closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. Soils are not hydric and are classified as Plainfield sand, 1 to 7 percent slopes, which are found on summits or upland landscapes.*

- **Chemical disposal**- Ensuring that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants. *The NMP will identify chemicals used or stored (or both) on-site and document appropriate disposal methods.*

- **Conservation practices to control runoff to waters of the U.S**. - Identifying appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, that control runoff of pollutants to waters of the U.S. *The NMP will be developed to NRCS standards which will specify specific setbacks for application of waste to fields to avoid sensitive areas, wells, and neighbors. Additionally, the barn was designed in a manner to flow rainwater away from the production area thereby avoiding contaminating rainwater.*

- **Manure and soil testing**- Establishing protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater. *By virtue of testing both the manure and the soil during the previous 12 months the data can be used to determine rates of nitrogen and phosphorus application from manure, litter, and process wastewater that can be utilized in each field thereby avoiding runoff situations that may threaten offsite waters.*

- **Protocols for land application-** the NMP will restrict applying manure, litter, or process wastewater closer than 100 feet to any downgradient surface water. States implement other setbacks, such as from property lines, homes, surface waters, wells, road rights-of-way, and public use areas. Those setbacks will be included in a NMP that will be developed before any waste is applied.

- **Records-** Identify specific records that will be maintained to document the implementation and management of the minimum elements described above. *The NMP will specify the records to be kept regarding the waste application.*

3.2.6 Impacts of the No Action

If the Proposed Action is not implemented, then the existing conditions of water quality at the site would continue and no impacts would occur.

3.2.7 Air Quality

The proposed farm would not be required to obtain an air permit in accordance with the EPA permitting authority, 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. The facility as proposed meets the setback requirements of the Livestock Management Facilities Act. According to the IL Department of Agriculture Notice of Intent to Construct, there are 12 landowners within the setback limits. There are no residences within the occupied residential setback of 1,320 feet and there are three residences within the populated area setback of 2,640 feet from the proposed building.

The predominant winds in Central Illinois are south – southwest. There are trees located to the south as a partial buffer. The setback requirements of the Livestock Management Facilities Act, administered by the Illinois Department of Agriculture, are legal requirements put in place to protect those inhabitants, commercial businesses, and places of congregation within a certain distance of livestock facilities.

3.2.8 Impacts of the Proposed Action

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. Exposed soils would be wet down to control fugitive dust. Similarly, during construction, minor and localized emissions associated with heavy machinery would be expected. None of this construction related impacts would have a significant or long-term adverse impact to surrounding air quality or communities.

Sometimes odors from livestock and poultry farms are an issue for nearby neighbors. Illinois Department of Environmental Management (IDEM) does not regulate odors from farms. The agency provides farmers with guidance on Best Management Practices (BMP) to reduce odors. The producer has agreed to implement all appropriate BMPs. The Nutrient Management Plan will add specific features that will address odor. However, the current plan and BMPs already incorporates several practices recommended by IDEM to reduce odors.

Best Management Practices incorporated into this plan to address odor:

- Diverting rainwater away from areas where it could become contaminated

- Maintaining proper gradient so that water does not stand in access roads and around the production facility
- Keeping watering devices in good repair
- Preventing liquids from collecting under animals and watering equipment by using slotted floors or other technologies
- Installing an underfloor ventilation system in confinement buildings where below floor manure storage is used
- Constructing lagoons, settling basins and holding ponds so that wastes do not overflow or leach into groundwater and so that odor is minimized
- Covering the lagoon, settling basin or holding pond to reduce surface odors being released
- Maintaining sufficient storage capacity to prevent overflow of lagoons, settling basins and holding ponds
- Developing a manure management plan (NMP will include)
- Applying manure on land which is not frozen or snow-covered
- Composting will be covered on concrete

The farm is in Mason County Illinois where they must comply with all criteria pollutants established by the EPA in compliance with the Clean Air Act. Mason County Illinois is not listed on EPA's website for Nonattainment/Maintenance for air quality.

Greenhouse Gas

The emissions of Greenhouse Gases from pig houses come from two sources: exhalation by pigs and release from manure (Philippe, 2015). Methane and nitrous oxide are the GHGs most associated with pork production. The potential emission sources are controlled by operating and maintenance requirements included in Best Management Practices (BMPs) and Nutrient Management Plans, which prevents significant air quality impacts. The estimated release of air pollutants does not cross the threshold identified in the Illinois State Implementation Plan (SIP) for the Clean Air Act.

Swine are not ruminants and have a low emissions factor. Cumulative emissions of GHGs produced by pigs and manure at pig house level are estimated at approximately 4.87 kg CO2equiv. per kg of carcass (Philippe, 2015). This plan calls for production 2.5 placements of 2400 head of pigs that will be taken from ween 5 kg (11 lbs.) to 21 kg (46 lbs.). Therefore:

- (2,400X 2.5) = 6,000 – pigs through facility
- 6,000 X 10 kg= 60,000 kg – kg gained
- 60,000 X 4.87 = 292,200 kg of CO2equiv.
- 292,200/1000 = **292.2 metric tons**

The contribution of this operations to total GHG gas is miniscule on a national, regional and local basis and impacts to this operation over time are not expected to be detectable. This operation, by virtue of its indoor, climate-controlled design along with redundant emergency procedures, including backup generators and dual sources of water, make this type of operation particularly resilient to climate change.

Ammonia

Currently, there are limited Federal regulations for ammonia emissions. The Clean Air Act (CAA) provides states with the Federal authority to regulate these emissions through their State Implementation Plans

(SIPs), particularly as a precursor emission to fine particulate matter formation. Though agricultural ammonia is not directly regulated by the Federal government, it is a public concern. NMPs prescribe practices to protect air quality by reducing nitrogen emissions (ammonia and nitrogen oxide (NOx) compounds) and the formation of atmospheric particles. NMPs contemplate practices that limit the loss of ammonia and these practices will be incorporated in the plan specifically to reduce the loss of excess nitrogen.

Practices for ammonia mitigation include:

- The nitrogen availability of the planned application of manure or inorganic nitrogen fertilizer must match plant uptake characteristics as closely as possible, taking into consideration the timing of nutrient application(s) to minimize leaching and atmospheric losses,
- Dietary Modification (e.g., reduce crude protein),
- Frequent manure removal,
- Manure treatment (e.g., additives acidification, drying, and separation),
- Housing design (reduced manure surface),
- Covered manure storage,
- Sub-surface injection or rapid incorporation of manure into soil,
- Facility location to lessen impact emissions,
- Barriers/shelter belts (e.g., vegetative buffer), and
- Exhaust air treatment (e.g., wet scrubber biofilter).

Several of the mitigations practices above are already included in the operation plan and required mitigation from EPA. When NRCS completes the NMP within 3 months of the operation, more practices will be included.

Because of the rural nature of the project and proximity to neighbors, it is unlikely that any effects would be noticeable. The proposed action is located on a 200+ acre tract of land. Wooded areas are to the south of the farm and open fields are to the north. 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 would serve to facilitate the dispersion of odors before reaching off farm residences.

3.2.9 Impacts of the No Action

If the Proposed Action is not implemented, then the existing conditions of air quality at the site would continue and no impacts would occur.

4. CUMULATIVE IMPACTS

A cumulative impact analysis is important to understanding how multiple actions in a particular time and space (e.g., geographic area) impact the environment. The current agency 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." Whereas the individual impact of one project in a particular area or region may not be considered significant, the result of numerous projects in the same area or region may cumulatively result in significant impacts. Cumulative impact analysis is subject to interpretation in analyzing the magnitude of impacts to a particular area or region. For this EA, the APE for cumulative impacts analysis is the Jordan Creek catchment or a six square mile area surrounding the proposed barn site and manure application fields.

Confinement livestock farms are relatively common in Mason County and in this region of Illinois. The barn would lie within the required setbacks of residences and populated areas. The land use in the surrounding area is dominated by agriculture, including livestock, grain, and cropland. The proposed swine operation would not have significant cumulative impacts.

4.1 Past, Present and Reasonably Foreseeable Actions

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 may include the development of lands directly adjacent to the proposed project site as well as surrounding areas. Much of the land near the proposed project area is in agriculture production. As noted above, there are other livestock operations within the cumulative effects area of analysis and the region is dominated by agricultural land uses. There appears to be an ongoing interest in the construction of new swine confinements on the part of both integrators and operators. However, no known projects are anticipated on this site or the immediate area.

4.2 Cumulative Analysis

4.2.1 Sole Source Aquifers

The project falls within the Mahomet Sole Source Aquifer recharge area. EPA Region 5 was consulted concerning best management practices and conditions for construction and operation in the recharge zone. Manure disposal at the site would be contained in a properly designed concrete storage pit and spread in the adjacent fields as fertilizer for crop uptake per agronomic recommendations.

4.2.2 Water Quality

The proposed swine operation would have a maximum operation of 2,400 hogs and is designated as a medium-sized AFO. Due to the limited size of the operation and that there will be no discharge to surface waters, there are no specific NPDES requirements for this project. The site is located in the uplands and far removed, over one mile, from any surface water resources. A NMP will be implemented

to avoid and minimize any impacts to water quality within the Jordan Creek watershed and to the Mahomet Sole Source Aquifer.

4.2.3 Air Quality

The past and present air quality has not experienced any harmful emissions. The proposed swine operation would emit a limited amount of dust, odor, and ammonia. The prevailing winds in central Illinois are from the south to southwest. There are a limited number of homes in the vicinity and no homes directly downwind. All residential setbacks would be followed.

5. LIST OF PREPARERS AND PERSONS AND AGENCIES CONTACTED

List of Preparers	
Name	**Title**
John W. Gehrke	Farm Loan Chief/ State Environmental Coordinator
Kale Horton	Regional Environmental Coordinator, FPAC BC Environmental Activities Division
Jason McMillin	Natural Resource Specialist, FPAC BC Environmental Activities Division
U.S. Fish & Wildlife Service	
State Historic Preservation Office, IDNR	
Natural Resource and Conservation Service, USDA	
Housing and Urban Development	
Illinois Environmental Protection Agency (EPA)	
U. S. EPA	

ENVIRONMENTAL DETERMINATION – The FSA preparer of the EA determines:

1. Based on an examination and review of the foregoing information and supplemental documentation attached hereto, I find that this proposed action:

   ☐ would have a significant effect on the quality of the human environment and an Environmental Impact Statement (EIS) must be prepared.

   X would not have a significant effect on the quality of the human environment and, therefore, an EIS will not be prepared.

2. I recommend that the Project Approval Official for this action make the following compliance determinations for the below-listed environmental requirements.

Not in compliance	In compliance	Not applicable	
	X		National Environmental Policy Act
	X		Clean Air Act
	X		Clean Water Act
	X		Safe Drinking Water Act
	X		Endangered Species Act

	X		Coastal Barrier Resources Act
	X		Coastal Zone Management Act
	X		Wild and Scenic Rivers Act/National Rivers Inventory
	X		National Historic Preservation Act
	X		Subtitle B, Highly Erodible Land Conservation, and Subtitle C, Wetland Conservation, of the Food Security Act
	X		Executive Order 11988 and 13690, Floodplain Management
	X		Executive Order 11990, Protection of Wetlands
	X		Farmland Protection Policy Act
	X		Department Regulation 9500-3, Land Use Policy
	X		E.O. 12898, Environmental Justice

3. I have reviewed and considered the types and degrees (context and intensity) of adverse environmental impacts identified by this assessment. I have also analyzed the proposal for its consistency with FSA environmental policies, particularly those related to important farmland protection, and have considered the potential benefits of the proposed action. Based upon a consideration of these factors, from an environmental standpoint, this project may:

   X Be approved without further environmental analysis and a Finding of No Significant Impact (FONSI) prepared.

   ☐ Not be approved because of the reasons identified under item b.

Environmental Determination – FSA State Environmental Co

Based on my review of the foregoing Environmental Assessment and related supporting documentation, I have determined:

X The appropriate level of environmental review and assessment has been completed and substantiates a Finding of No Significant Impact (FONSI); therefore, an EIS will not be prepared and processing of the requested action may continue without further environmental analysis. A FONSI will be prepared.

☐ The Environmental Assessment is not adequate and further analysis or action is necessary for the following reason(s):

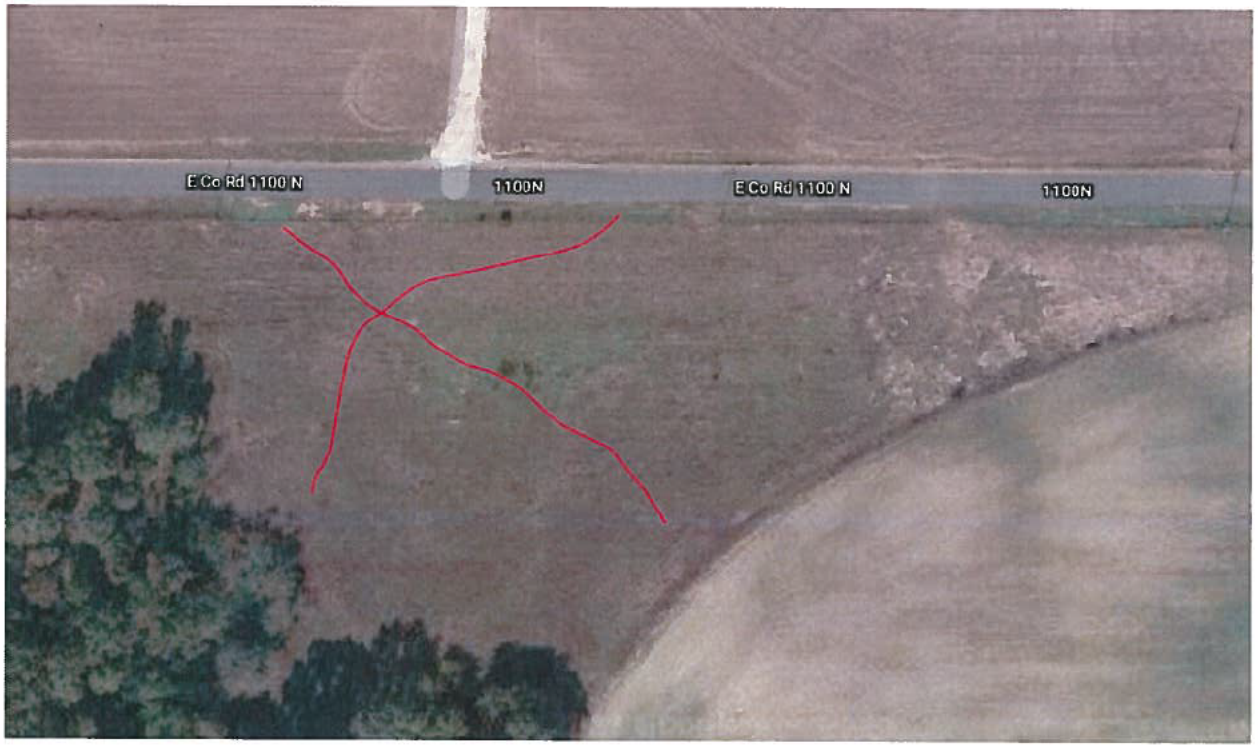
☐ The Environmental Assessment has established the proposed action cannot be approved for the following reason(s):

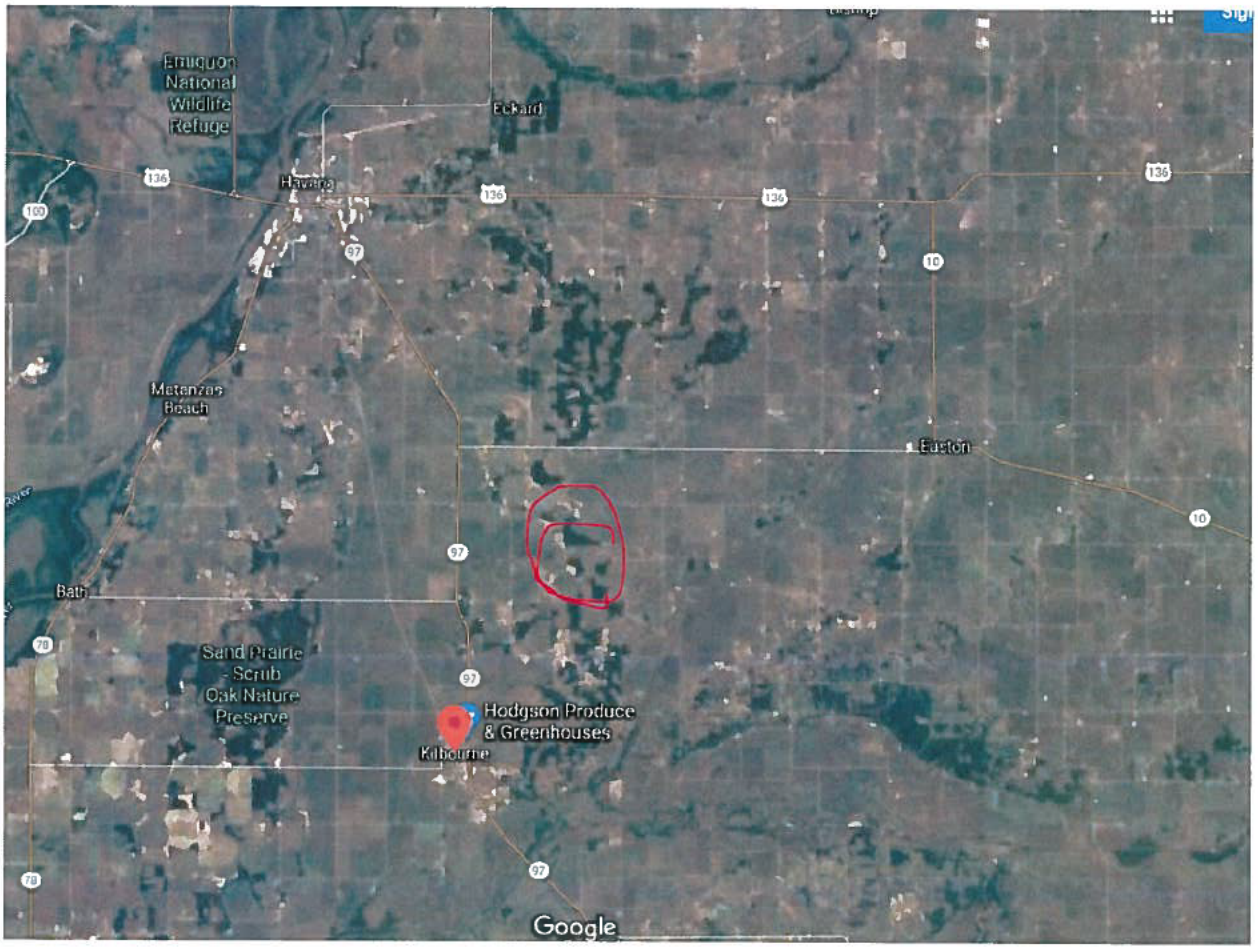
Signature of SEC USDA John W. Gehrke Digitally signed by JOHN GEHRKE DN: c=US, o=U.S. Government, ou=Department of Agriculture, cn=JOHN GEHRKE, 0.9.2342.19200300.100.1.1=12001000138626 Date: 2021.09.16 13:00:52 -05'00' Adobe Acrobat version: 2021.005.20060	Date September 16, 2021
John W. Gehrke, State Environmental Coordinator	

Appendix A

Fanter Farms

Section 3, Township 20 North, Range 8 West, 3rd Principal Meridian




Eckard
Havana
Metanzas Beach
Easton
Bath
Sand Prairie - Scrub Oak Nature Preserve
Hodgson Produce & Greenhouses
Kilbourne
Google


E Co Rd 1100 N
E Co Rd 1100 N
1100N
E Co Rd 1100 N
E Co Rd 1060N
E Co Rd 1060N


E Co Rd 1100 N
1100N
E Co Rd 1100 N
1100N

Appendix B

Fanter Farms Site Visit 5/14/2021

Site facing north east

Site facing north

Looking southwest from the building site

5/14/2021: I completed a site visit and found the proposed site area flagged. I walked the tract after reviewing the IPAC report and the wetland certification completed by NRCS. I did not note anything of concern. The applicant, Josh Fanter, met me there after I had walked the property. He confirmed the location of the building site. We discussed the environmental review process. I explained the need to elevate it to an environmental assessment, which required publication. We were already aware of local concern with the proposal, which is why we required a higher level or review. **JWG** / Farm Loan Chief / State Environmental Coordinator

Appendix C

USDA United States Department of Agriculture

Farm Production and Conservation

Farm Service Agency

Illinois State Office
3500 Wabash Avenue
Springfield, IL 62711-8287

April 2, 2021

State Historic Preservation Office
Attn: Review and Compliance
1 Old State Capitol Plaza
Springfield, IL 62701

Dear Mr. Appleman:

The Farm Service Agency, USDA has received a request to provide loan assistance for the construction of a swine finishing building in Mason County. Your review of the findings are requested as part of our environmental evaluation in accordance with Section 106 of the National Historic Preservation Act. You may have already reviewed this site; the plan has been submitted to the Illinois Department of Agriculture for compliance with the Livestock Management Facilities Act.

Project name: Fanter Farms / Josh Fanter
11270 Peterville Road
Havana, IL 62644 (See project location below)

Project Description: The proposal is to construct a 101' x 193'swine finishing building with a 10'deep pit for manure storage. The APE is approximately 3 acres. We have attached several maps for the project, to be constructed in the NW ¼ of the NE ¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, **Mason County, IL. Please** note, **the closest intersection is E. Co Road 1100N and E Co. Road 1920 N.**

A site inspection and records search have been completed. We have determined that the project as proposed will not have an adverse effect on any cultural resources. Please forward any comments and recommendations you have for our consideration within 30 days of the date of this letter. I can be reached at (217)-331-6873, email at john.gehrke@usda.gov, or by mail at USDA Farm Service Agency, 3500 West Wabash, Springfield, IL 62711-8287. Thank you for your assistance.

Sincerely,

John W. Gehrke

Digitally signed by JOHN GEHRKE
DN: c=US, o=U.S. Government, ou=Department of Agriculture, cn=JOHN GEHRKE, 0.9.2342.19200300.100.1.1=12001000138626
Date: 2021.04.02 12:32:04 -05'00'
Adobe Acrobat version: 2021.001.20142

John W. Gehrke
Illinois FSA Environmental Coordinator

Cc: Mason County FSA Office

Enclosures

Tribal Directory Assessment Information

Download Excel

Contact Information for Tribes with Interests in Illinois

Tribal Name

– Citizen Potawatomi Nation, Oklahoma

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
John Barrett	Chairman	1601 South Gordon Cooper Drive Shawnee, OK 74801	(405) 275-3121	(405) 275-0198		rbarrett@potawatomi.org	www.potawatomi.org
Kelli Mosteller	THPO	1601 S. Gordon Cooper Drive Shawnee, OK 74801	(405) 878-5830	(405) 878-8933		kelli.mosteller@potawatomi.org	www.potawatomi.org

– Delaware Nation, Oklahoma

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Deborah Dotson	President	PO Box 825 Anadarko, OK 73005	(405) 247-2448	(405) 247-9393		ddotson@delawarenation.com	www.delawarenation.com
Nekole Alligood	Director of Cultural Resources & Section 106	PO Box 825 Anadarko, OK 73005	(405) 247-8903	(405) 247-9393		Nalligood@delawarenation.com	www.delawarenation.com

– Eastern Shawnee Tribe of Oklahoma

Eastern Shawnee Tribe of Oklahoma

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Glenna Wallace	Chief	PO Box 350 Seneca, MO 64865	(918) 666-2435	(918) 666-2186		gwallace@estoo.net	www.estoo-nsn.gov
Brett Barnes	THPO	12705 S. 705 Road Wyandotte, OK	(918) 666-2435 ext. 1845	(918) 533-4104		bbarnes@estoo.net	www.estoo-nsn.gov

– Forest County Potawatomi Community of Wisconsin

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Ned Daniels, Jr.	Chairman	P.O. Box 340 Crandon, WI 54520	(715) 478-7200	(715) 478-5280		Ned.DanielsJr@fcpotawatomi-nsn.gov	https://www.fcpotawatomi.com/
Michael LaRonge	THPO	P.O. Box 340 Crandon, WI 54520	(715) 478-4942	(715) 478-7225		Michael.LaRonge@FCPotawatomi-nsn.gov	https://www.fcpotawatomi.com/

– Hannahville Indian Community, Michigan

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Kenneth Meshigaud	Chairperson	N14911 Hannahville B1 Road Wilson, MI 49896	(906) 466-2932	(906) 466-2933		tyderyien@hannahville.org	www.hannahville.net

– Ho-Chunk Nation of Wisconsin

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
William Quackenbush	THPO	W9814 Airport Road Black River Falls, WI 54615	(715) 284-7181	(715) 284-7449		BQuackenbush@ho-chunk.com	www.ho-chunknation.com
Jon Greendeer	President	W9814 Airport Road Black River Falls, WI 54615	(715) 284-9343	(715) 284-2632		Jon.Greendeer@Ho-Chunk.com	www.ho-chunknation.com

– Iowa Tribe of Kansas and Nebraska

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Lance Foster	THPO	3345 B Thrasher Rd. White Cloud, KS 66094	(785) 595-3258	(785) 595-6610		lfoster@lowas.org	http://iowatribeofkansasandnebraska.com/
Tim Rhodd	Chairperson	3345 B Thrasher Rd. White Cloud, KS 66094	(785) 595-3258	(785) 595-6610		Trhodd@iowas.org	http://iowatribeofkansasandnebraska.com/

– Iowa Tribe of Oklahoma

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Amy Scott	THPO	335588 E 750 Rd Perkins, OK	(405) 547-2402			ascott@iowanation.org	http://bahkhoje.com/
Edgar Kent	Chairman	335588 E 750 Rd Perkins, OK	(405) 547-2402	(405) 547-1032		ekent@iowanation.org	http://bahkhoje.com/

– Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Lester Randall	Chairman	824 111th Drive Horton, KS 66439	(785) 486-2131	(785) 486-2801		Lester.Randall@ktik-nsn.gov	www.ktik-nsn.gov

– Kickapoo Tribe of Oklahoma

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Kent Collier	NAGPRA	PO Box 70 McLoud, OK 74851	(405) 964-4227	(405) 964-4228		pamwesley@kickapootribeofoklahoma.com	www.kickapootribeofoklahoma.com
Estavio Elzondo	Chairman	PO Box 70 McLoud, OK 74851	(405) 964-4227	(405) 964-4228		eelzondo@okkt.net	www.kickapootribeofoklahoma.com

1 - 10 of 23 results

« ‹ 1 2 3 › » 10

Download Excel

From: Gehrke, John - FSA, Springfield, IL
To: kelli.mosteleer@potawatomi.org
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 11:40:00 AM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Citizen Potawatomi Nation have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: Nalligood@delewarenation.com
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 11:42:00 AM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Delaware Nation have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: Lester.Randall@ktik-nsn.gov
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:32:00 PM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

To: Mr. Lester Randall, Chairman

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From:	Gehrke, John - FSA, Springfield, IL
To:	rbarrett@potawatomi.org
Subject:	FW: Mason County Illinois USDA Project
Date:	Friday, May 7, 2021 11:49:00 AM
Attachments:	NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf Fanter Farms map.docx

Dear Chairman Barrett,

Please see the message below. Is there a different person I should contact regarding environmental consultation?

John Gehrke
217 331-6873

From: Gehrke, John - FSA, Springfield, IL
Sent: Friday, May 7, 2021 11:40 AM
To: kelli.mosteleer@potawatomi.org
Subject: Mason County Illinois USDA Project

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Citizen Potawatomi Nation have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From:	Gehrke, John - FSA, Springfield, IL
To:	ddotson@delawarenation.com
Subject:	FW: Mason County Illinois USDA Project
Date:	Friday, May 7, 2021 11:54:00 AM
Attachments:	NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf Fanter Farms map.docx

Dear President Dotson,

Please see the message below. Is there a different person I should contact regarding environmental consultation?

John Gehrke
217 331-6873

From: Gehrke, John - FSA, Springfield, IL
Sent: Friday, May 7, 2021 11:42 AM
To: Nalligood@delewarenation.com
Subject: Mason County Illinois USDA Project

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Delaware Nation have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From:	Gehrke, John - FSA, Springfield, IL
To:	tyderyien@hannahville.org
Subject:	FW: Mason County Illinois USDA Project
Date:	Friday, May 7, 2021 12:11:00 PM
Attachments:	NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf Fanter Farms map.docx

To: Mr. Kenneth Meshigaud, Chairperson

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Hannahville Indian Community have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: Mikchael.LaRonge@FCPotawatomi-nsn.gov
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:14:00 PM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

To: Mr. Michael LaRonge, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Forest County Potawatomi Community of Wisconsin have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: BQuackenbush@ho-chunk.com
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:16:00 PM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

To: Mr. William Quackenbush, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Ho-Chunk Nation of Wisconsin have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From:	Gehrke, John - FSA, Springfield, IL
To:	Ned.DanielsJr@fcpotawatomi-nsn.gov
Subject:	FW: Mason County Illinois USDA Project
Date:	Friday, May 7, 2021 12:19:00 PM
Attachments:	NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf Fanter Farms map.docx

Dear Chairman Daniels,

Please see the message below. Is my contact information incorrect or out of date?

John Gehrke
217 331-6873

From: Gehrke, John - FSA, Springfield, IL
Sent: Friday, May 7, 2021 12:15 PM
To: Mikchael.LaRonge@FCPotawatomi-nsn.gov
Subject: Mason County Illinois USDA Project

To: Mr. Michael LaRonge, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Forest County Potawatomi Community of Wisconsin have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: pamwesley@kickapootribeofoklahoma.com
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:22:00 PM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Kickapoo Tribe of Oklahoma have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From:	Gehrke, John - FSA, Springfield, IL
To:	lfoster@iIowas.org
Subject:	Mason County Illinois USDA Project
Date:	Friday, May 7, 2021 12:25:00 PM
Attachments:	NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf Fanter Farms map.docx

To: Mr. Lance Foster, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Iowa tribe of Kansas and Nebraska have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: ascott@iowanation.org
Subject: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:27:00 PM
Attachments: NOTICE OF INTENT TO CONSTRUCT Mason County, IL.pdf
Fanter Farms map.docx

To: Amy Scott, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Iowa Tribe of Oklahoma have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

From: Gehrke, John - FSA, Springfield, IL
To: lfoster@iowas.org
Subject: RE: Mason County Illinois USDA Project
Date: Friday, May 7, 2021 12:28:00 PM

To: Mr. Lance Foster, THPO

Good afternoon,

The Farm Service Agency, USDA, has received a request for financial assistance to build a livestock facility in Mason County, IL. We have attached a document submitted to the Illinois Department of Agriculture for permitting purposes. This document provides specific details of the project, including the location.

Would the Iowa tribe of Kansas and Nebraska have interest in receiving additional information or submitting comments regarding this project? Please feel free to email or call me and we would be happy to answer any questions or provide additional information regarding the proposal. The project has NOT been approved by USDA and construction has NOT begun. Thank you for your consideration!

John W. Gehrke
State Environmental Coordinator
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

Illinois Department of Agriculture

NOTICE OF INTENT TO CONSTRUCT
APPLICATION FORM

Pursuant to the Livestock Management Facilities Act (510 ILCS 77/1 et seq.) (we), the undersigned, do hereby file with the Illinois Department of Agriculture a Notice of Intent to Construct a Livestock Management Facility or Livestock Waste Handling Facility as follows:

A) Legal description of the land on which the livestock facility will be constructed —

Quarter-Quarter	Quarter	Section	Township	Range	P.M.
Example: NE	*NW*	*19*	*12-North*	*3-West*	*3rd*
NW	NE	3	20N	8W	3rd

County Name Mason

A) Name(s) and addresses of the facility and owner(s) or operator(s) of the facility —
(Please check the appropriate box to indicate the address for mailing correspondence.)

☐ Facility Name Fanter Farms

Facility Address NA
(Specify the actual facility address, if one exists.)

City, State, Zip NA

Telephone _____

☐ Owner or Operator Name Josh Fanter

Address [redacted]

City, State, Zip Havana, IL 62644

Telephone _____ Mobile Phone [redacted]

Fax # _____

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

B) Type and size of the facility and number of animal units —

☑ Proposed facility is an entirely new facility

☐ Proposed facility is an expansion of an existing facility
- ☐ Expansion classifies facility as a "New Facility"
- ☐ Expansion does not classify facility as a "New Facility"

IMPORTANT NOTICE: This state agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Livestock Management Facilities Act (510 ILCS 77*et seq.*). Failure to provide this information shall prevent this form from being processed. This form has been approved by the State Forms Management Center.

** *"New Facility"-means a livestock management facility or a livestock waste handling facility the construction or expansion of which is commenced on or after May 21, 1996 (the effective date of the Livestock Management Facilities Act). Expanding a facility where the fixed capital cost of the new components constructed within a 2 year period does not exceed 50% of the fixed capital cost of a comparable entirely new facility shall not be deemed a new facility as used in the Livestock Management Facilities Act.*

ANIMAL UNITS (based on the maximum design capacity of the facility):
(CHECK AND COMPLETE ALL THAT APPLY)

Number of Existing Animal Units *(if applicable)* = NA

Number of Proposed Additional Animal Units:

	# of Head	x	Animal Unit Factor	=	# of Animal Units
☐ Beef		x	1.0	=	
☐ Milking Dairy		x	1.4	=	
☐ Dairy (young stock)		x	0.6	=	
☐ Laying hens or broilers		x	0.005	=	
☐ Laying hens or broilers (With continuous overflow watering)		x	0.01	=	
☐ Laying hens or broilers (With liquid manure handling systems)		x	0.03	=	
☐ Sheep		x	0.1	=	
☑ Swine (>55lbs)	2400	x	0.4	=	960
☐ Swine (<55lbs)		x	0.03	=	
☐ Turkeys		x	0.02	=	
☐ Ducks		x	0.02	=	
☐ Horses		x	2.0	=	
☐ Other:_____		x		=	
	Number of Proposed Additional Animal Units			=	960
	Total Number of Animal Units *(existing + proposed additional)*			=	960

C) Type and size of the facility and number of animal units (continued) —

TYPE OF PROPOSED LIVESTOCK MANAGEMENT FACILITY:

(CHECK ALL THAT APPLY)

- ☐ Breeding
- ☐ Gestation
- ☐ Farrowing
- ☐ Nursery
- ☐ Grower
- ☑ Finisher
- ☐ Freestall Barn
- ☐ Feed Lot / Yard
- ☐ Milking Parlor
- ☐ Other:

TYPE OF PROPOSED LIVESTOCK WASTE HANDLING FACILITY

(CHECK ALL THAT APPLY):

- ☑ Waste storage structure under building (pit storage structure)
- ☐ Above-ground waste storage structure
- ☐ In-ground waste storage structure
- ☐ Earthen lagoon
- ☐ Runoff holding pond
- ☐ Other:

** *A construction plan of each waste handling structure with design specifications of the structure noted as prepared by or for the owner or operator must also be submitted to and approved by the Department prior to the commencement of construction.*

EXISTING AND PROPOSED FACILITY SIZE:

(List the size of each building or structure, by facility type) (Specify "proposed" or "existing")

Example: Farrowing building with concrete under building pit (proposed) – 40 feet x 80 feet x 8 feet deep
Finishing building with shallow pit to a lagoon (existing) – 300' x 100' x 2' deep
Earthen Lagoon (existing) – 400 feet x 360 feet x 10 feet deep

Status	Name	Phrase	L (ft)	W (ft)	D (ft)	Swine >55 lbs	Waste Handling System
Proposed	Barn 1	Fin	193'	101'	10'	2400	Underfloor Deep Pit (8 ft)
				Totals	2400		
				AU Factor	0.4		
				Total AU	960		

D) Names and addresses of the owners, including local, State and federal governments, of the property located within the setback area (both the residence and populated area setback areas) — ** *Applicable only to facilities which meet the definition of a "new facility"*

(LIST HERE AND/OR ATTACH ADDITIONAL SHEETS AS NECESSARY)

Please See Attachments A & B

E) Distance to the nearest town, residence, occupied residence, non-farm business, and common place of assembly —

Town	Kilbourne	(name)	21,500	feet
Residence	Timothy G Fanter	(name)	1,880	feet
Occupied residence	Timothy G Fanter	(name)	1,880	feet
Non-Farm business	Ebkens Country Fresh Produce	(name)	7,750	feet
Common place of assembly	Ebkens Country Fresh Produce	(name)	7,750	feet

F) Map or sketch showing the proposed facility and setbacks — *(CHECK ALL THAT APPLY)*

All Facilities

☑ Plat Map, ☑ Topographic Map or ☐ sketch attached.
Please See Attachment C (Plat Map) and Attachment D (Topographic Map)

☑ Locations of ***all*** residences, populated areas, non-farm businesses and common places of assembly within or near the setback boundaries have been clearly identified on the map or sketch.
Please See Attachment E (Setback Map)

" New Facilities"

☑ Setback distances (both residence and populated area setback distances) have been clearly identified on the map or sketch or in the case of an existing facility, the distances between the proposed construction and the existing facility as well as the distance to nearest residences has been identified.
Please See Attachment E (Setback Map)

" Expansion Facilities"

☐ Plot plan depicting all existing and proposed structures. Plot plan also indicates: the distance from the proposed structure(s) to the existing structure(s), the distance from proposed structure(s) to the owner/operator's residence (if on site), the distance from the proposed structure(s) to the nearest non-owned residence.

G) A statement identifying whether a request for decrease in setbacks, pursuant to *(510 ILCS 77/35 (g))*, has been sought and whether the request has been granted or denied — *(CHECK ALL THAT APPLY)*

☑ No request for a setback decrease has been sought.

☐ A request(s) for a setback decrease is being submitted to the Illinois Department of Agriculture.

- ☐ Waiver(s) attached
- ☐ Waiver(s) not attached

☐ A request for a setback decrease has been submitted to the Illinois Department of Agriculture and no action relative to its acceptance or denial has been received.

☐ A request for a setback decrease has been submitted to the Illinois Department of Agriculture and has been granted by the Department.

H) Property owner notification

Within 10 calendar days after receipt of the Department's acknowledgment of setback compliance, owners or operators of "new" livestock management or "new" livestock waste handling facilities ***not subject to the public informational meeting process*** are required to mail by certified mail, return receipt requested, a copy of the complete notice of intent to construct to the owners of the property located within the setback areas.

Within 10 calendar days after receipt of the Department's notification that all information concerning the notice of intent to construct is complete, owners or operators of "new" livestock management or "new" livestock waste handling facilities ***subject to the public informational meeting process*** are required to mail by certified mail, return receipt requested, a copy of the complete notice of intent to construct to the owners of the property located within the setback areas.

I, the undersigned, certify that the information contained in this application form is true and correct to the best of my knowledge.

Joshua G. Fanter
Owner or Authorized Agent *(PRINTED)*

03-16-2021
Date

Signature of Owner or Authorized Agent

Farmer
Title

Questions relative to the filing of Notices of Intent to Construct may be directed to the Illinois Department of Agriculture at 217/785-2427 (Voice/TDD).

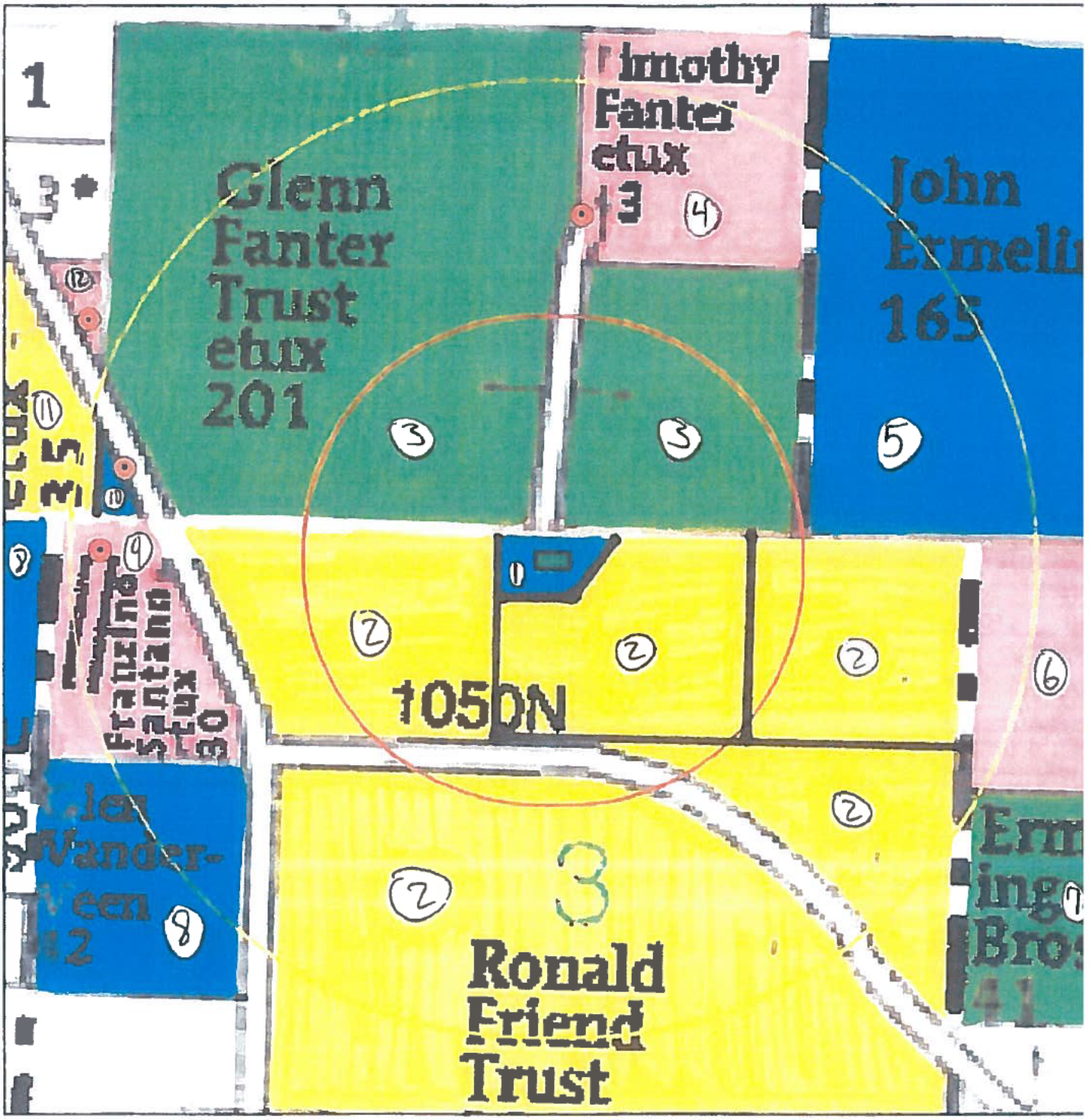
Completed forms and all documentation should be submitted to:
Livestock Waste Program, Illinois Department of Agriculture, Bureau of Environmental Programs, P.O. Box 19281, Springfield, Illinois 62794-9281

Attachment A

Landowners Within Setbacks					
Code	Section	Twn	Rng	Owner Full Name	Address
Blue 1	3	20N	8W	Abby Fanter	[redacted]
Yellow 2	3	20N	8W	Ronald L Friend Trust	[redacted]
Green 3	34	21N	8W	Glenn R Fanter Revocable Trust	[redacted]
Pink 4	34	21N	8W	Timothy G Fanter ET UX	[redacted]
Blue 5	35	21N	8W	John W Ermeling	[redacted]
Pink 6	2	20N	8W	John W Ermeling	[redacted] 62644
Green 7	2	20N	8W	Ermeling Bros	[redacted]
Blue 8	3	20N	8W	Glen D Vanderveen	[redacted]
Pink 9	3	20N	8W	Franzino Santanna ET UX	[redacted]
Blue 10	34	21N	8W	James A Farwell	[redacted]
Yellow 11	35	21N	8W	Charles J Gharst ET UX	[redacted]
Pink 12	36	21N	8W	Randy L Burgett Sr	[redacted]

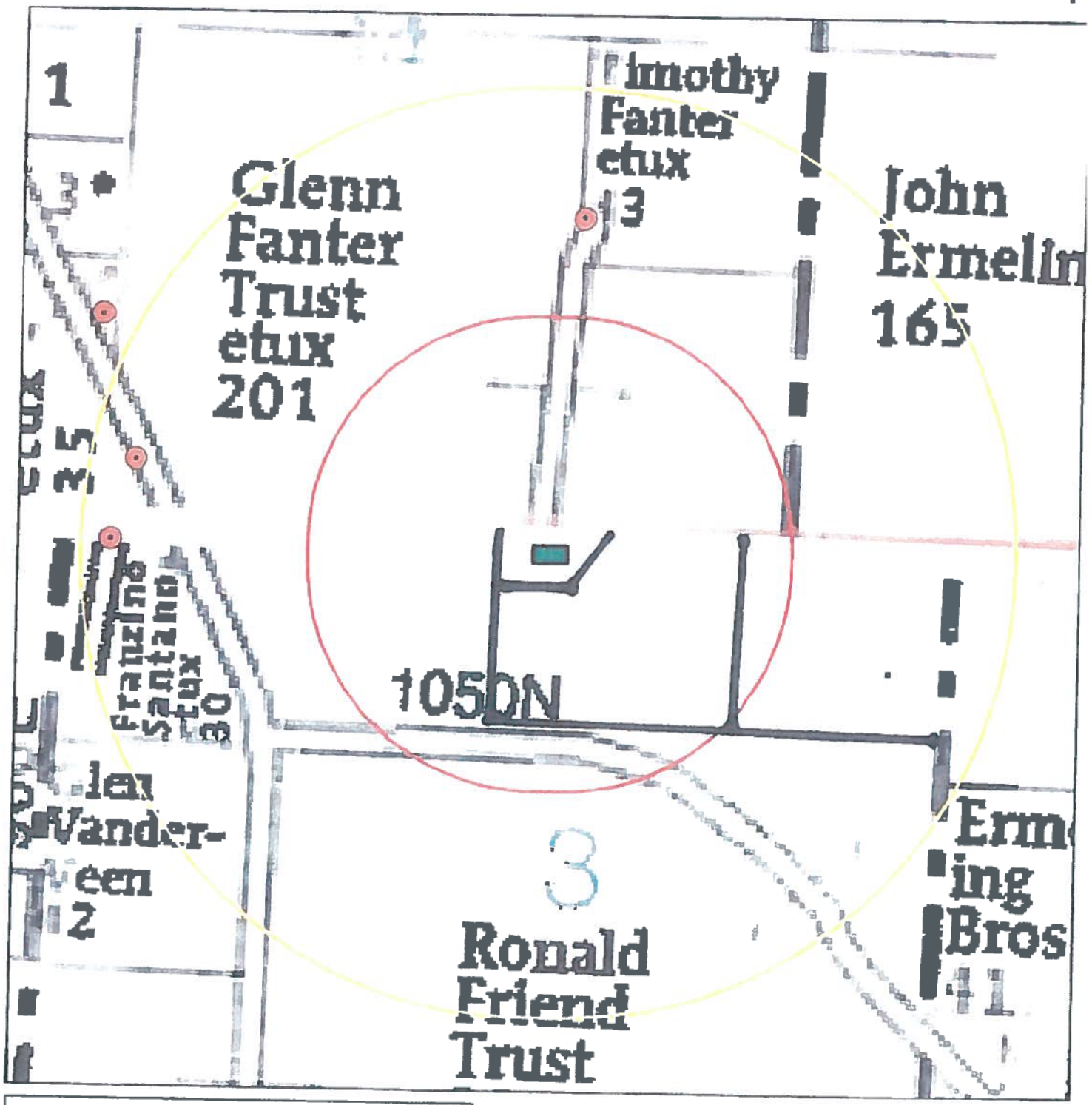
Josh Fanter

Attachment B - Landowner Ma



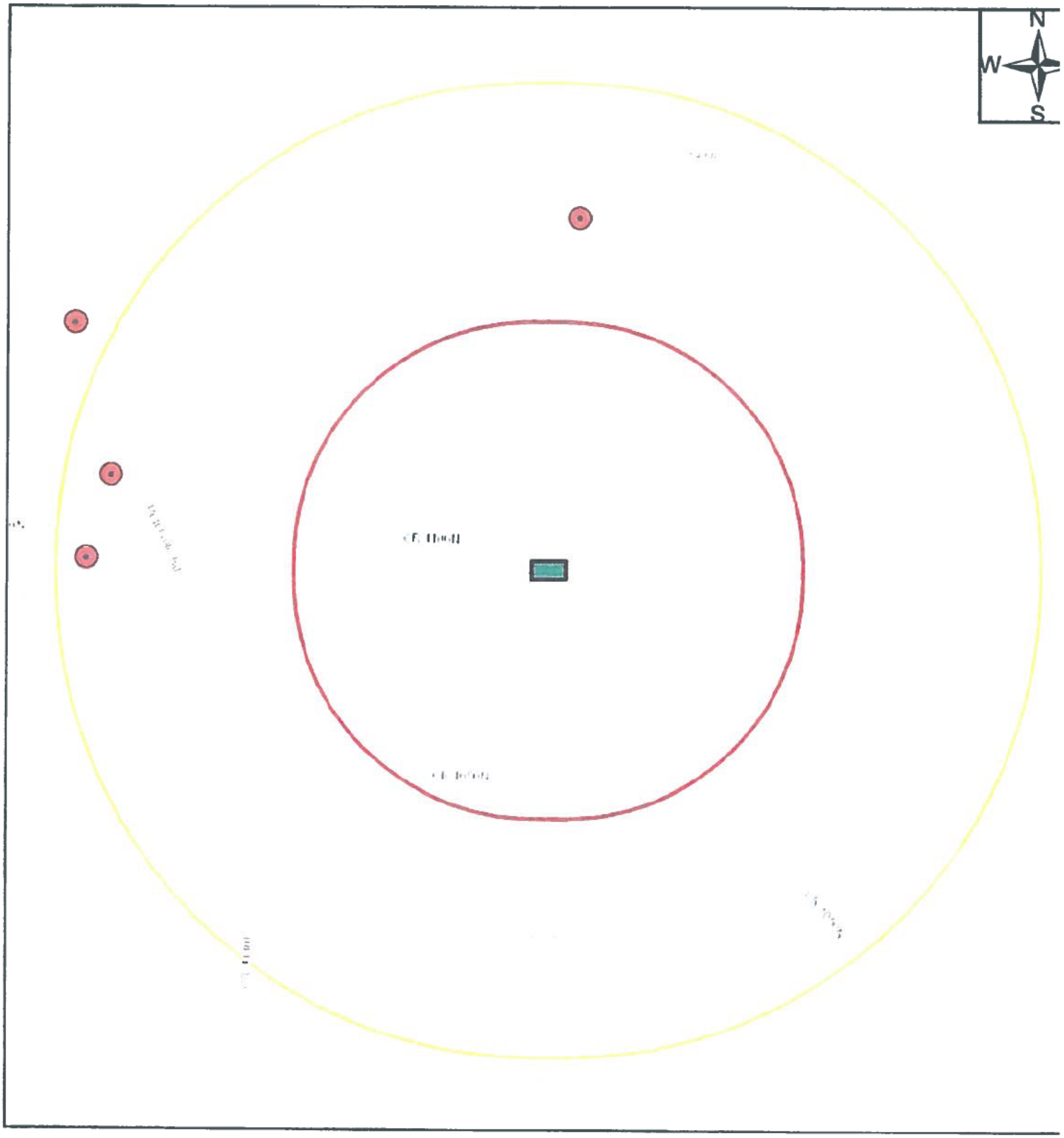
Josh Fanter

Attachment C - Plat Map



Josh Fanter

Attachment D - Topographic Ma



Legend

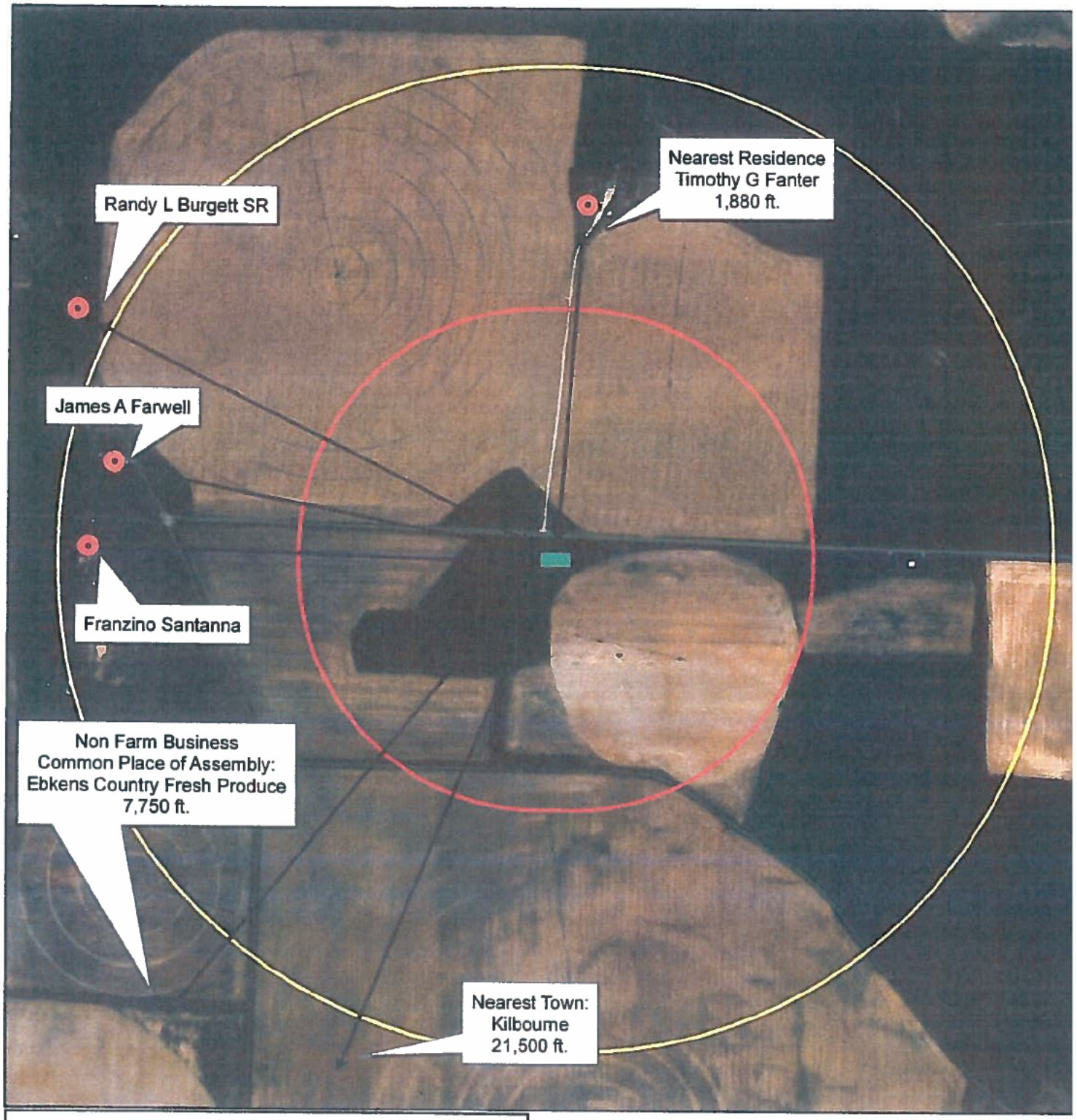
- Residence
- Proposed Facility
- Occupied_Residence_1320ft_Setback
- Populated_Area_2640ft_Setback

Topographic Source: USDA-NR

0 0.125 0.25 0.5 Miles

Josh Fanter

Attachment E - Setback Map



Legend

- Residence
- Non Farm Business Common Place of Assembly
- Proposed Facility
- Occupied_Residence_Setback_1320ft
- Populated_Area_Setback_2640ft

0 0.1 0.2 0.4 Miles

Illinois Department of Agriculture

Bureau of Environmental Programs
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/785-2427 (voice) • Fax 217/524-4882
Pesticide Misuse Hotline 1-800-641-3934 (voice) • 1-866-287-2999 (TDD/TTY)

LIVESTOCK WASTE PROGRAM
INITIAL NOTICE OF CONSTRUCTION PLAN COMPLETENESS
Non-Lagoon Livestock Waste Handling Facility

Registrant:
Fanter Farms
Josh Fanter
[redacted]
Havana, IL 62644

Facility Location:
Kilbourne, IL

Facility ID#
LF1250160000

Date Issued: March 19, 2021

A Notice of Non-Lagoon Construction Plan Completeness is hereby granted to the above-designated registrant to construct a single livestock waste handling facility ***as stated in the construction plan application submitted to the Department as follows:***

Construction of a single livestock waste handling facility that shall have the following dimensions:

Maximum Length =	193 feet
Maximum Width =	102 feet
Maximum Depth =	10 feet
Design Capacity =	189,000 ft^3

Pursuant to 35 Illinois Administrative Code 506.304 (c), this structure shall include a perimeter foundation drain, which must include a sampling port to allow for quarterly sampling pursuant to 8 Illinois Administrative Code 900.511.

The construction plan for the aforementioned structure has been reviewed and deemed complete by the Illinois Department of Agriculture pursuant to the Livestock Management Facilities Act (Act), 510 Illinois Compiled Statutes 77/13.

Pursuant to 510 ILCS 77/13(g), an initial site inspection was conducted by a representative of the Department on March 1, 2021.

Please be advised that, pursuant to the Act and rule, the Department shall make additional site inspections during the construction and post-construction phase and shall require modifications when necessary to ensure the project shall be in compliance with the requirements of the regulation. **Please notify the Department at least 5 days prior to the commencement of construction.**

Fanter Farms
Facility ID # LF1250160000

March 19, 2021

Further, pursuant to 510 ILCS 77/13(f), upon completion of construction but prior to the placing of the structure in service, the owner or operator shall certify to the Department that the structure has been constructed or modified in accordance with the requirements of the Act and rule and that the information provided during the submittal process is correct. The Department, upon receipt of the completion of construction certification shall inspect the construction site to determine compliance with the construction standards of the Act and rule. Upon completion of this inspection, the Department shall send an official written notice to the owner or operator of the facility, indicating that the structure has met the standards of the Act and rule and that it may be placed into service or identifying the remedial measures necessary to enable the structure to be in compliance.

Please be advised that this letter is not to be construed as a release from any other federal, state or local laws or regulations. If you have any questions or comments, please contact us at 217-785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: File
Deana Poe, IEPA

LF125016cpack

Illinois Department of Agriculture

Bureau of Environmental Programs
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/785-2427 (voice) • Fax 217/524-4882
Pesticide Misuse Hotline 1-800-641-3934 (voice) • 1-866-287-2999 (TDD/TTY)

March 19, 2021

ALTERNATIVE DESIGN

Fanter Farms
Josh Fanter
[redacted]
Havana, IL 62644

RE: LF1250160000

Dear Applicant:

The Department is in receipt of your request for an alternative design concerning the Fanter Farms facility (See Attached). As required, the request did contain a certification from a Licensed Professional Engineer that the grant of the modification is at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the stated requirements or that the alternative or waiver is at least as protective as the stated requirements.

Please consider this letter as your written notification that the alternative design request(s) has been granted pursuant to 35 Illinois Administrative Code 506.106. If you have any questions or if the Department may be of service to you, please contact us at 217-785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: file
LF125016Alternativedesign

Fanter Farms
Facility ID # LF1250160000

March 19, 2021

Further, pursuant to 510 ILCS 77/13(f), upon completion of construction but prior to the placing of the structure in service, the owner or operator shall certify to the Department that the structure has been constructed or modified in accordance with the requirements of the Act and rule and that the information provided during the submittal process is correct. The Department, upon receipt of the completion of construction certification shall inspect the construction site to determine compliance with the construction standards of the Act and rule. Upon completion of this inspection, the Department shall send an official written notice to the owner or operator of the facility, indicating that the structure has met the standards of the Act and rule and that it may be placed into service or identifying the remedial measures necessary to enable the structure to be in compliance.

Please be advised that this letter is not to be construed as a release from any other federal, state or local laws or regulations. If you have any questions or comments, please contact us at 217-785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: File
Deana Poe, IEPA

LF125016cpack

1st Letter

Illinois Department of Agriculture

Bureau of Environmental Programs
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/785-2427 (voice) • Fax 217/524-4882
Pesticide Misuse Hotline 1-800-641-3934 (voice) • 1-866-287-2999 (TDD/TTY)

LIVESTOCK WASTE PROGRAM
ACKNOWLEDGMENT OF "SETBACK COMPLIANCE"

Registrant:
Fanter Farms
[redacted]
Havana, IL 62644

Facility Location:
Kilbourne, IL

Facility Identification Number:
LF1250160000

Date Issued: February 26, 2021

Dear Facility Owner/Operator:

Your notice of intent to construct was received by the Department and reviewed for compliance with the provisions of the Livestock Management Facilities Act (510 ILCS 77/1 et seq.) and associated rules (8 Illinois Administrative Code Part 900). Pursuant to 510 ILCS 77/11, the Department hereby provides notice to **Fanter Farms** that the setback provisions of the Livestock Management Facilities Act have been met.

Please be advised that this Acknowledgment of "Setback Compliance" is applicable only to the project specifically described in the notice filed with the Department. Also, please be advised that, pursuant to 8 IAC 900.304, the date the Department issued the acknowledgment of setback compliance pursuant to 8 IAC 900.303 (b)(3) or notified the owner or operator that all information had been submitted pursuant to 8 IAC 900.303(c)(1), **[February 26, 2021]**, shall be considered as the base date for setback determination purposes. The base date shall expire within one year, unless the conditions of 8 IAC 900.304 (b) have been met.

Please be advised that the construction of said facility shall not begin until all other applicable requirements of the Livestock Management Facilities Act *as well as any other applicable laws and regulations* have been met. This includes mailing copies of the complete notice of intent to construct form to owners of property within the setback areas, approval of construction plans for the livestock waste handling facility, and compliance with the public informational meeting requirements 510 ILCS 77/12 (if applicable). Please be advised that copies of the complete notice of intent to construct form must be mailed by certified mail, return receipt requested, to the owners of property within 10 days after receipt of this letter. Please provide the Department with a copy of the certified mail receipts (PS Form 3800).

Please also be advised that the scope of this acknowledgment is expressly limited to compliance with the setback provisions of 510 ILCS 77/11 and associated rules. **Thus, no statements relative to compliance with other applicable federal, state or local requirements are expressed or implied.** The registrant is directed to inquire with appropriate local or county officials relative to the applicability of any other requirements prior to project initiation.

If you should have any questions or comments, please feel free to contact us at (217) 785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: file
Deana Poe, IEPA

LF125016noitcack

Illinois Department of Agriculture

Bureau of Environmental Programs
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/785-2427 (voice) • Fax 217/524-4882
Pesticide Misuse Hotline 1-800-641-3934 (voice) • 1-866-287-2999 (TDD/TTY)

LIVESTOCK MANAGEMENT FACILITIES PROGRAM "NON-LAGOON LIVESTOCK WASTE HANDLING FACILITY CONSTRUCTION PLAN" REVIEW

ADDITIONAL INFORMATION REQUIRED

Applicant: Fanter Farms Josh Fanter 11270 Peterville Road Havana, IL 62644	**Date:** March 2, 2021 **Facility ID Number:** LF1250160000 **Facility Location:** Kilbourne, IL **Date Received:** February 26, 2021

Dear Applicant:

Your Application for the Registration of a Non-Lagoon Livestock Waste Handling Facility was received by the Department and processed accordingly. Based upon our review, it was determined that additional information or alterations of the existing plans are required for approval. The following items are offered for your consideration for incorporation into the application.

ADDITIONAL INFORMATION REQUIRED

1) Submit a completed Non-Lagoon Livestock Waste Handling Facility Certification of Site Investigation with supporting documentation as necessary.

Upon receipt of amendments to your application or requested supplemental information, we shall finalize our review of your proposal.

We appreciate your cooperation with the Department on this matter. Should you have any questions or comments regarding this letter, please contact the us at (217) 785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: file
LF125016cpintair

Frank & West
Environmental Engineers, Inc.

PROFESSIONAL ENGINEER CERTIFICATION FORM

for

ALTERNATIVE DESIGN

I certify that the design of the connection dowels between the columns and floor is at least as protective of the groundwater, surface water, and the structural integrity of the livestock waste management facility as the stated requirements of the *Livestock Management Facilities Act* and MidWest Plan Service (MWPS-36) *Concrete Manure Storages Handbook.*

Professional Engineer **P.E. Seal**

Name: Chris J. West

Firm: Frank & West, Inc.

Address: 1032 S. 2nd St.

Springfield, IL 62704

Phone: (217) 679-7361

IL Registration No.: 062-57229

License Exp. Date: 11/30/2021

Signature: Chris J. West

Date: February 24, 2021

RECEIVED

FEB 26 2021

Dept. of Agriculture
Livestock Waste Program

PROFESSIONAL ENGINEER CERTIFICATION FORM

Illinois Department of Agriculture

Bureau of Environmental Programs
State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/785-2427 (voice) • Fax 217/524-4882
Pesticide Misuse Hotline 1-800-641-3934 (voice) • 1-866-287-2999 (TDD/TTY)

March 19, 2021

ALTERNATIVE DESIGN

Fanter Farms
[redacted]
Havana, IL 62644

RE: LF1250160000

Dear Applicant:

The Department is in receipt of your request for an alternative design concerning the Fanter Farms facility (See Attached). As required, the request did contain a certification from a Licensed Professional Engineer that the grant of the modification is at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the stated requirements or that the alternative or waiver is at least as protective as the stated requirements.

Please consider this letter as your written notification that the alternative design request(s) has been granted pursuant to 35 Illinois Administrative Code 506.106. If you have any questions or if the Department may be of service to you, please contact us at 217-785-2427.

Sincerely,

ILLINOIS DEPARTMENT OF AGRICULTURE

Rosario Johnstone, Manager
Technical Services & Pesticide Laboratory

cc: file
LF125016Alternativedesign

Frank & West
Environmental Engineers, Inc.
1023 S 2nd Street
Springfield, IL 62704
Phone: 217/679-7361
Fax: 217/679-8362

FIELD BORING LOG

SITE FILE NO. 21-113B1 COUNTY MASON BORING NO. 1 WELL NO.

SITE NAME FANTER FARMS SURF. ELEV. 0' TOTAL DEPTH 13'

FED. ID. NO. AUGER DEPTH 13' ROTARY DEPTH

QUADRANGLE NW 1/4 OF NE 1/4 SEC. 3 T. 20N R. 8W DATE: START 03/10/21 FINISH 03/10/21

BORING LOCATION SEE ATTACHED PLOT PLAN

DRILLINGEQUIP AUGER

PERSONNEL
G -
H -
F - JMN
H -

ELEV.	DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	RECOVERY	PID READING	PENETROMETER	REMARKS
	YELLOWISH BROWN SAND	1' 2' 3' 4'						
	GRAYISH BROWN SAND	5' 6' 7' 8' 9' 10' 11' 12'						BOTTOM OF PROPOSED PIT @ 8' B.G.S.
	E.O.B. @ 13'	13' 14'						

Frank & West
Environmental Engineers, Inc.

PROFESSIONAL ENGINEER CERTIFICATION FORM

for

ALTERNATIVE DESIGN

I certify that the design of the connection dowels between the interior wall and floor is at least as protective of the groundwater, surface water, and the structural integrity of the livestock waste management facility as the stated requirements of the *Livestock Management Facilities Act* and MidWest Plan Service (MWPS-36) *Concrete Manure Storages Handbook*.

Professional Engineer **P.E. Seal**

Name: Chris J. West

Firm: Frank & West, Inc.

Address: 1032 S. 2nd St.

Springfield, IL 62704

Phone: (217) 679-7361

IL Registration No.: 062-57229

License Exp. Date: 11/30/2021

Signature: Chris J. West

Date: February 24, 2021

RECEIVED

FEB 26 2021

Dept. of Agriculture
Livestock Waste Program

1032 S. 2nd Street • Springfield, IL 62704 • Phone: 217/679-7361 • Fax: 217/679-8362

Frank & West
Environmental Engineers, Inc.

PROFESSIONAL ENGINEER CERTIFICATION FORM

for

ALTERNATIVE DESIGN OF PRECAST CONCRETE SLATS

I certify that the design of the precast concrete slats manufactured by Hog Slat, Inc. for the Josh Fanter facility, including reinforcement placement as detailed in the attached Frank & West, Inc. drawing (drawing # 01-13801F), is at least as protective of the groundwater, surface water, and the structural integrity of the livestock waste management facility as the stated requirements of the *Livestock Management Facilities Act* and MidWest Plan Service (MWPS-36) *Concrete Manure Storages Handbook*.

Professional Engineer

P.E. Seal

Name: Chris J. West

Firm: Frank & West, Inc.

Address: 1032 S. 2nd St.

Springfield, IL 62704

Phone: (217) 679-7361

IL Registration No.: 062-57229

License Exp. Date: 11/30/2021

Signature: Chris J. West

Date: February 24, 2021

1032 S. 2nd Street • Springfield, IL 62704 • Phone: 217/679-7361 • Fax: 217/679-8362

Frank & West
Environmental Engineers, Inc.

PROFESSIONAL ENGINEER CERTIFICATION FORM

for

ALTERNATIVE DESIGN OF PRECAST CONCRETE BEAMS

I certify that the design of the precast concrete beams manufactured by Hog Slat, Inc. for the Josh Fanter facility, including reinforcement placement as detailed in the attached Frank & West, Inc. drawing (drawing # 01-13802R), is at least as protective of the groundwater, surface water, and the structural integrity of the livestock waste management facility as the stated requirements of the *Livestock Management Facilities Act* and MidWest Plan Service (MWPS-36) *Concrete Manure Storages Handbook*.

Professional Engineer

P.E. Seal

Name: Chris J. West

Firm: Frank & West, Inc.

Address: 1032 S. 2nd St.

Springfield, IL 62704

Phone: (217) 679-7361

IL Registration No.: 062-57229

License Exp. Date: 11/30/2021

Signature: Chris J. West

Date: February 24, 2021

CHRIS J. WEST
062-57229
REGISTERED
PROFESSIONAL
ENGINEER
ILLINOIS

RECEIVED
FEB 26 2021
Dept. of Agriculture
Livestock Waste Program

1032 S. 2nd Street • Springfield, IL 62704 • Phone: 217/679-7361 • Fax: 217/679-8362

INDEX OF PAGES

_L PLANS CONFORM TO MWPS-36 OR TR-9 AS APPROPRIATE.
'RUCTION OUTSIDE THE PERVUE OF THIS DOCUMENT SHALL CONFORM TO THE APPROPRIATE ACI CODE.

:INFORCEMENT:

LONG TERM STORAGE AT JOB SITE.
ON TIMBERS OR OTHER CRIBBING.
ENOUGH TOGETHER TO PREVENT EXCESSIVE SAGGING OF THE BUNDLES.
A SLANT TO ALLOW FOR WATER DRAINAGE AND AIR FLOW.
T ALL STEEL REINFORCEMENT DOCUMENTATION MEETS PROJECT REQUIREMENTS.

:RETE SUBGRADES:

CONSTRUCTION AREA AND AT SITE FILL AREAS SHALL BE REMOVED. CONTRACTOR
RIOR TO CONSTRUCTION PER THE GENERAL CONDITIONS.
M THE FOUNDATION AREA AND STOCKPILED FOR USE AS TOP DRESSING FOR
SS OTHERWISE SHOWN ON THE DRAWINGS.
'LOOR, BEFORE FILLING OR PLACING AGGREGATE COURSES, WITH HEAVY
CH AS A FULLY LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS
DO NOT PROOF ROLL WET OR SATURATED SUBGRADES.
HALL BE PLACED TO A THICKNESS OF 3 TO 6 INCHES, AS NECESSARY, TO
ON TO FINISHED GRADE.
ED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR

NCOUNTERED DURING ANY EXCAVATION, THEY SHALL BE REMOVED TO A MINIMUM
TERIOR HORIZONTAL EXTENT OR EXTERIOR BERM TOE OF ANY WASTE STORAGE
ID THE FACILITY.

CONCRETE SUBGRADES:

. THE REQUIRED EXCAVATION AND PREPARATION OF THE UNDERLYING FOUNDATION
THE TESTING AND INSPECTION AGENCY. FILL SHALL BE PLACED BEGINNING AT THE
DATION. NO FILL SHALL BE PLACED ON A FROZEN SURFACE.
IECOMES TOO HARD AND SMOOTH FOR PROPER BOND WITH THE SUCCEEDING
ARALLEL TO THE AXIS OF THE FILL TO A DEPTH NOT LESS THAN 2 INCHES BEFORE

REAS SHALL BE PIT RUN GRAVEL, OR APPROVED ENGINEERED GRANULAR MATERIAL,
ID COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR MAXIMUM DENSITY. GRAVEL
ABS SHALL BE 6" OF CLEAN SAND OR 3/4" CURED STONE WITH FINES COMPACTED.
DZEN GROUND AND NO FROZEN MATERIALS MAY BE USED AS BACK FILL.
RE SOIL TESTING FIRM AND ALLOW TESTING OF SUBGRADES AND EACH FILL LAYER.
00 SQ. FEET OF SUBGRADE AREA AND ONE TEST FOR EVERY 100 LINEAR FEET OF
BSEQUENT EARTHWORK ONLY AFTER TEST RESULTS PREVIOUSLY COMPLETED WORK
REMENTS.

PACTED AND/OR INSITU CLAY LINER

CONSTRUCTION AREA AND AT SITE FILL AREAS SHALL BE REMOVED. CONTRACTOR
RIOR TO CONSTRUCTION PER THE GENERAL CONDITIONS.
STRIPPED FROM CONSTRUCTION AREA AND STOCKPILED FOR USE AS TOP DRESSING
THE PROPOSED COMPACTED CLAY LINER.
ESS SHALL BE AS FOLLOWS FROM NRCS CPS 520:
I ≤ 16'; THE LINER THICKNESS SHALL BE 12"
I 16.'–24'; THE LINER THICKNESS SHALL BE 18"
I 24.1–30'; THE LINER THICKNESS SHALL BE 24"
ALL BE AT LEAST 2 FEET OF NATURAL SOIL BELOW THE BOTTOM AND SIDES
AWMFH PART 651 APPENDIX 10D
ALL BE AT LEAST 2 FEET OF NATURAL SOIL BELOW THE BOTTOM AND SIDES
AWMFH PART 651 APPENDIX 10D
CLAY LINER SHALL BEGIN WITH PLACING LOOSE LIFTS IN THICKNESS OF A MAXIMUM
SED BY NRCS SPECIFICATIONS.

THE LABORATORY. THIS TESTING IS AN APPROVED METHOD WITHIN AWMFH PART 651

8.) LINER PERMEABILITY SHALL BE AS FOLLOWS FROM IL 35 IAC CODE 506.304 & 35 IAC
   A. FOR EARTHEN STORAGES THAT COME INTO CONTACT WITH LIQUID WASTE SHALL H
      CONDUCTIVITY OF EQUAL TO OR LESS THAN 1X10–7 CM/SEC.
   B. FOR EARTHEN STORAGES THAT COME INTO CONTACT WITH POULTRY WASTE IN A
      HAVE A HYDRAULIC CONDUCTIVITY OF EQUAL TO OR LESS THAN 1X10–6 CM/SE
   C. THE EARTHEN FLOOR OF ENCLOSED DEEP BEDDED LIVESTOCK SYSTEMS THAT HAV
      SOLID FORM SHALL HAVE A HYDRAULIC CONDUCTIVITY OF EQUAL TO OR LESS TH

F. PREPARATION OF FORMS:

1.) PRIOR TO THE PLACEMENT OF CONCRETE, THE FORMS AND SUBGRADE SHALL BE FREE
WATER, ICE, SNOW, EXTRANEOUS, OIL, MORTAR, OR OTHER HARMFUL SUBSTANCES OR
REINFORCING STEEL OR OTHER SURFACES REQUIRED TO BE BONDED TO THE CONCRETE
SURFACES SHALL BE CLEANED BY AIR–WATER CUTTING, WET SANDBLASTING, OR WIRE
2.) THE SITE SHALL BE GRADED TO THE DIMENSIONS AND ELEVATIONS AS SPECIFIED IN TH
3.) ALL SURFACES SHALL BE FIRM AND DAMP PRIOR TO PLACING CONCRETE. CONCRETE S
DRIED EARTH, UNCOMPACTED FILL OR FROZEN SUBGRADE OR IN STANDING WATER. THE
ISOLATE THE CONCRETE FROM UNSUITABLE FOUNDATIONS WILL NOT BE PERMITTED.
4.) THE FORMS AND ASSOCIATED FALSE–WORK SHALL BE SUBSTANTIAL AND UNYIELDING A
SO THAT THE FINISHED CONCRETE WILL CONFORM TO THE SPECIFIED DIMENSIONS AND
FORMS SHALL BE MORTAR TIGHT. FORMS WITH TORN SURFACES, WORN EDGES, DENTS
BE USED. FORMS SHALL BE COATED WITH A FORM RELEASE AGENT BEFORE BEING SET
COATING MATERIAL SHALL NOT COME IN CONTACT WITH THE STEEL REINFORCEMENT OR
AGAINST WHICH FRESH CONCRETE IS TO BE PLACED.
5.) REINFORCEMENT SHALL BE ACCURATELY PLACED AS SHOWN ON THE DRAWINGS AND SE
MANNER THAT WILL PREVENT ITS DISPLACEMENT DURING THE PLACEMENT OF CONCRETE
HANGERS, METAL SPACERS, PLASTIC CHAIRS, OR CONCRETE CHAIRS SHALL BE USED TO
PRECAST CONCRETE CHAIRS SHALL BE MANUFACTURED FROM CONCRETE EQUAL IN QUA
PLACED. PRECAST CONCRETE CHAIRS SHALL BE MOIST AT THE TIME CONCRETE IS PLAC
6.) REINFORCEMENT FOR FLATWORK SHALL BE BY A MINIMUM OF 1 SUPPORT EVERY THIRD
EACH DIRECTION, WHICHEVER SPACING IS SMALLER. SUPPORT CHAIRS SHALL HAVE A M
SQUARE INCH IN CONTACT WITH THE SUB GRADE.
7.) STEEL TYING AND FORM CONSTRUCTION ADJACENT TO NEW CONCRETE SHALL NOT BE
CURED FOR AT LEAST 12 HOURS.
8.) CONCRETE JOINTS SHALL BE OF THE TYPE SHOWN ON THE CONSTRUCTION DRAWINGS.
9.) WATERSTOPS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS AND SECURED IN POS
DOES NOT OCCUR DURING CONCRETE PLACEMENT. WATERSTOPS MAY BE SECURED TO I
"HOG RING" TYPE FASTENERS.

G. EPOXY GROUTING OF REBAR OR INSTALLATION OF OTHER

1.) DRILL HOLE IN CONCRETE NO MORE THAN ½ THE THICKNESS OF THE SLAB OR WALL
2.) DRILL HOLE ¼" LARGER THAN REBAR TO BE INSTALLED.
3.) CLEAN HOLE BY BLOWING COMPRESSED AIR INTO HOLE TO REMOVE ALL LOOSE PARTI
4.) HOLE MUST BE FREE OF WATER
5.) THE EPOXY MUST HAVE A PULLOUT STRENGTH GREATER THAN 5,000 LBS.
6.) THE EPOXY MUST BE CHEMICALLY RESISTANT TO LIVESTOCK MANURE.
7.) USE EPOXY APPROVED BY PROJECT ENGINEER OF THE COMPANY IN THE TITLE BLOCK
8.) ANY BOLT OR ANY OTHER ANCHORING TYPE DEVICES SHALL BE TIED TO STRUCTURAL
BY THE MANUFACTURER.

FINISH FREE OF HONEYCOMB AND WITH A MINIMUM OF WATER AND AIR POCKETS.

EXTEND AS NEARLY AS PRACTICABLE TO THE POINT OF DEPOSIT. DROPPING THE
N 5' (1.5m) OR DEPOSITING A LARGE QUANTITY AT ANY POINT AND RUNNING OR
NOT BE PERMITTED. THE CONCRETE FOR WALLS WITH AN AVERAGE THICKNESS OF
PLACED WITH TUBES SO THAT DROP IS NOT GREATER THAN 5' (1.5 m).

FED BY INTERNAL VIBRATION, EXCEPT IN THIN SECTIONS OR INACCESSIBLE
INTERNAL VIBRATION IS NOT PRACTICABLE.

O USE A SUFFICIENT NUMBER OF VIBRATORS TO ENSURE THAT CONSOLIDATION
THE CONCRETE HAS BEEN DEPOSITED IN THE FORMS.

NTO THE CONCRETE IMMEDIATELY AFTER IT IS DEPOSITED AND SHALL BE MOVED
HOROUGHLY WORK THE CONCRETE AROUND THE REINFORCEMENT, EMBEDDED
ND ANGLES OF THE FORMS. VIBRATORS SHALL NOT BE ATTACHED TO THE FORMS,
CE OF THE CONCRETE.

AT POINTS UNIFORMLY SPACED AND NOT FARTHER APART THAN TWICE THE
S VISIBLY EFFECTIVE. THE DURATION OF THE VIBRATION AT THE POINTS OF
THOROUGHLY CONSOLIDATE THE CONCRETE INTO PLACE BUT SHALL NOT BE
ATION.

TINUOUS HORIZONTAL LAYERS. WHEN IT IS NECESSARY BY REASON OF AN
COMPLETE HORIZONTAL LAYER IN ONE OPERATION, SUCH LAYER SHALL TERMINATE
BATCHES SHALL FOLLOW EACH OTHER CLOSELY AND IN NO CASE SHALL THE
CING OF SUCCESSIVE BATCHES BE GREATER THAN 20 MINUTES.

HE MIX AT JOB SITE.

OF BATCHING AT THE PLANT.

ERFORM AT LEAST 1 SLUMP TEST PER DAY, 1 EVERY MINIMUM 100 CUBIC YARDS,
PECIFICATIONS ARE SUSPECTED.
CT ENGINEER OR HIS REPRESENTATIVE MAY REJECT MATERIALS
PECIFICATIONS.
ERFORM AT LEAST 1 BREAK TEST PER SECTION(S) OF STRUCTURE POURED.
TO FWI AS SOON AS RECEIVED.

VIBRATION SPECEFICATIONS:

QUENCY ninute)	AVERAGE AMPLITUDE (Inches)	CENTRIFUGAL FORCE (lbs.)	RADIUS OF ACTION (inches)	RATE OF CONCRETE PLACEMENT (yds. per hr.)
	0.02–0.04	300–1000	20–32	12–45

- 144 HOURS BEAMS AND SUSPENDED SLABS
- FOR FURTHER CONSTRUCTION TYPES NOT LISTED ABOVE, SEE ACI 347.

L. REPAIRS TO CONCRETE:

1.) ALL REPAIRS TO CONCRETE BECAUSE OF CRACKING, HONEYCOMBING, OR ANY OTHER DEF ACCORDING TO: (NRCS NATIONAL ENGINEERING HANDBOOK CONSTRUCTION SPECIFICATION TRUCTURES DATED JANUARY 2009)

M. BACKFILLING:

1.) ONCE THE CONCRETE IS PROPERLY CURED, BACK FILL CAN BE PLACED. AVOID BACK FIL HARD OR FROZEN SOIL LUMPS, OR CONSTRUCTION DEBRIS. BACK FILL SHOULD BE PLACE FROM THE TOP OF THE WALL.

2.) DO NOT PLACE BACKFILL UNTIL PRECAST SLATS ARE PROPERLY IN PLACE.

3.) ADJACENT TO STRUCTURES AND PIPES WITHIN 2 FEET OF STRUCTURES OR PIPES, EARTH 4–INCH LIFTS (PRIOR TO COMPACTION) IN A MANNER ADEQUATE TO PREVENT DAMAGE T ALLOW THE STRUCTURE OR PIPE TO GRADUALLY AND UNIFORMLY ASSUME THE BACK FILL BE ACCOMPLISHED BY MEANS OF MANUALLY DIRECTED POWER TAMPERS OR PLATE VIBRA UNLESS OTHERWISE SPECIFIED. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN 5 FI PIPE. COMPACTION BY MEANS OF DROP WEIGHTS OPERATING FROM A CRANE OR HOIST (PERMITTED.

4.) LENSES OR POCKETS OF UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH SPI DIRECTED BY THE TESTING AND INSPECTION AGENCY. THE EXTENT OR REMOVAL AND THE MATERIALS WILL BE DETERMINED BY THE TESTING AND INSPECTION AGENCY.

5.) THE SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE STRUCTURE AT A

D IMMEDIATELY PROTECT AND CURE THE CONCRETE DUE TO RAPID DRYING
L NOT BE ALLOWED TO DRY AFTER PLACEMENT AND DURING THE CURING PERIOD.
CESSARY TO (1) RESTRICT PLACEMENT TO LATE AFTERNOON OR EVENING, (2)
ASSURE COVERAGE OF THE PREVIOUS LAYER WHILE IT WILL STILL RESOUND READILY
NTIL CONDITIONS IMPROVE.

NG AND CURING:

EDULING CONCRETE PLACEMENTS AT OTHER–THAN–NORMAL HOURS MAY BE
INCLUDE EASE OF HANDLING AND PLACING, AND MINIMIZING THE RISK OF PLASTIC

ANSPORT, PLACE, CONSOLIDATE, AND FINISH THE CONCRETE AT THE FASTEST POSSIBLE
SHOULD BE SCHEDULED SO THAT IT IS PLACED PROMPTLY ON ARRIVAL,

E SHOULD BE OF SUITABLE DESIGN AND HAVE AMPLE CAPACITY TO PERFORM EFFICIENTLY.

UIPMENT AND WORKERS TO CONSOLIDATE THE CONCRETE IMMEDIATELY AS IT IS
TEM H)

URING THE CONCRETE:

T THE PROJECT SITE FOR MOISTENING THE SUBGRADE, AS WELL AS FOR FOGGING
NCRETE PLACEMENT. FOR MOIST CURING, USE WATER WITH A TEMPERATURE NO MORE
ONCRETE TEMPERATURE TO AVOID THERMAL SHOCK.

S:

MATERIALLY REDUCES HOT WEATHER DIFFICULTIES. DELAYS INCREASE SLUMP LOSS AND
S TO OFFSET THOSE LOSSES. THE CONCRETE SHOULD NOT BE PLACED FASTER THAN IT
FINISHED.

TWORK ON THE GROUND, THE SUBGRADE SHOULD BE MOIST, BUT FREE OF STANDING WATER.

F FINISHING OPERATIONS, EFFORTS SHOULD BE MADE TO PROTECT THE CONCRETE FROM
TREME AMBIENT TEMPERATURE DIFFERENTIAL. WHENEVER POSSIBLE, THE CONCRETE AND
EPT IN A UNIFORM MOISTURE AND TEMPERATURE CONDITION TO ALLOW THE CONCRETE TO
NGTH AND DURABILITY. PROCEDURES FOR KEEPING EXPOSED SURFACES FROM DRYING SHOULD
JT INTERRUPTION. FAILURE TO DO SO CAN RESULT IN EXCESSIVE DRYING SHRINKAGE AND
NG METHOD SHOULD BE CONTINUED FOR AT LEAST 7 DAYS. IN ADDITION, CONCRETE
) BECOME SURFACE–DRY AT ANY POINT DURING THE TRANSITION. CONCRETE SHOULD ALSO
KAGE CRACKING DUE TO RAPID TEMPERATURE DROPS, PARTICULARLY DURING THE FIRST 24
IS ASSOCIATED WITH A COOLING RATE OF MORE THAN 5°F (3°C) PER HOUR, OR MORE THAN
CONCRETE WITH A LEAST DIMENSION LESS THAN 12 IN. HOT WEATHER PATTERNS INCREASE
DUE TO VAST DAY AND NIGHT TEMPERATURE DIFFERENCES.

T CURING IS TO COVER THE CONCRETE WITH IMPERVIOUS SHEETING OR FABRIC MATS KEPT
SE OR SIMILAR MEANS. THE TEMPERATURE OF WATER USED FOR INITIAL CURING
THAT OF THE CONCRETE TO AVOID THERMAL SHOCK.

CT SUNLIGHT SHOULD USE HEAT–REFLECTING, WHITE–PIGMENTED COMPOUNDS WHERE
CONDITIONS, A MATERIAL SHOULD BE SELECTED THAT ENSURES EQUAL OR GREATER
Y ASTM C309. APPLICATION OF AN APPROVED MOISTURE–RETENTIVE MATERIAL SHOULD
CE OF SURFACE WATER SHEEN AFTER THE FINAL FINISHING PASS. MOST CURRYING
ANY SURFACE AGAINST WHICH ADDITIONAL CONCRETE OR OTHER MATERIALS ARE TO

2.) WHEN THE MINIMUM DAILY ATMOSPHERIC TEMPERATURE IS LESS THAN 40 DEGREES F, CONCR
AND HEATED IMMEDIATELY AFTER PLACEMENT. THE TEMPERATURE OF THE CONCRETE AND AIR
MAINTAINED AT NO LESS THAN 50 DEGREES F NOR MORE THAN 90 DEGREES F FOR THE DU

3.) THE CURING PERIOD MAY BE REDUCED TO 3 DAYS WHEN TYPE III CEMENT IS USED. AN ADD
AND A MAXIMUM OF 6 GALLONS OF ADDED WATER PER CUBIC YARD MAY BE USED IN LIEU

4.) COMBUSTION HEATERS SHALL HAVE EXHAUST FLUE GASES VENTED OUT OF THE CONCRETE PI
PERMITTED TO DRY THE CONCRETE.

B. OBJECTIVES PRINCIPLES, AND PLANNING:

1.) OBJECTIVES:
–PREVENT DAMAGE TO CONCRETE DUE TO EARLY AGE FREEZING. AT 50°F (10°C), MOST WELI
REACH A COMPRESSIVE STRENGTH OF 500 psi WITHIN 48 HOURS.
–ENSURE THAT THE CONCRETE DEVELOPS THE REQUIRED STRENGTH FOR SAFE REMOVAL OF
SAFE LOADING OF THE STRUCTURE DURING AND AFTER CONSTRUCTION.

2.) PRINCIPLES:
CONCRETE PROTECTED FROM FREEZING UNTIL IT ATTAINS A COMPRESSIVE STRENGTH OF 500
EXPOSURE TO A SINGLE FREEZING CYCLE (POWERS 1962).

3.) PLANNING:
PLANS TO PROTECT FRESH CONCRETE FROM FREEZING AND TO MAINTAIN TEMPERATURES ABO
SHOULD BE MADE WELL BEFORE FREEZING ARE EXPECTED TO OCCUR. EQUIPMENT AND MATEF
BEFORE COLD WEATHER IS LIKELY TO OCCUR, NOT AFTER CONCRETE IS PLACED AND ITS TEN

4.) SUBGRADE CONDITION:
CONCRETE SHOULD NOT BE PLACED ON FROZEN SUBGRADE. REMOVE ALL FROST BEFORE PLA
THAWED SOIL DISTURBED BY FROST. PLACEMENT OF INSULATION OVER THE SUBGRADE, OR PI
ANY FROST IN THE SOIL AND RAISE THE SUBGRADE TEMPERATURE ABOVE 32°F. WHEN THE C
COOLER OR 5°F WARMER THAN THE SUBGRADE, DIFFERENTIAL RATES OF SETTING BETWEEN TI
RESULT IN VARIOUS SURFACE DEFECTS INCLUDING PLASTIC SHRINKAGE CRACKING, BLISTERING

C. TEMPERATURE DROP AFTER REMOVAL OF PROTECTION:

1.) AT THE END OF THE PROTECTION PERIOD, CONCRETE SHOULD BE COOLED GRADUALLY TO REI
STRAINS BETWEEN THE INTERIOR AND EXTERIOR OF THE STRUCTURE. THE TEMPERATURE DROF
EXCEED THE RATES INDICATED IN TABLE 1.

D. EQUIPMENT, MATERIALS, AND METHODS OF TEMPERATURE PR

1.) INTRODUCTION:
THE TEMPERATURE OF CONCRETE PLACED DURING COLD WEATHER SHOULD BE MAINTAINED A
RECOMMENDED TEMPERATURES IN LINE 1 OF TABLE 1 AND FOR THE LENGTHS OF TIME REC
IN–PLACE STRENGTH HAS REACHED A PREVIOUSLY ESTABLISHED TARGET VALUE.

2.) INSULATING MATERIALS:
HEAT OF HYDRATION IS RETAINED BY USING INSULATING BLANKETS ON UNFORMED SURFACE
EFFECTIVE, KEEP INSULATION IN CLOSE CONTACT WITH THE CONCRETE OR THE FORM SURFA

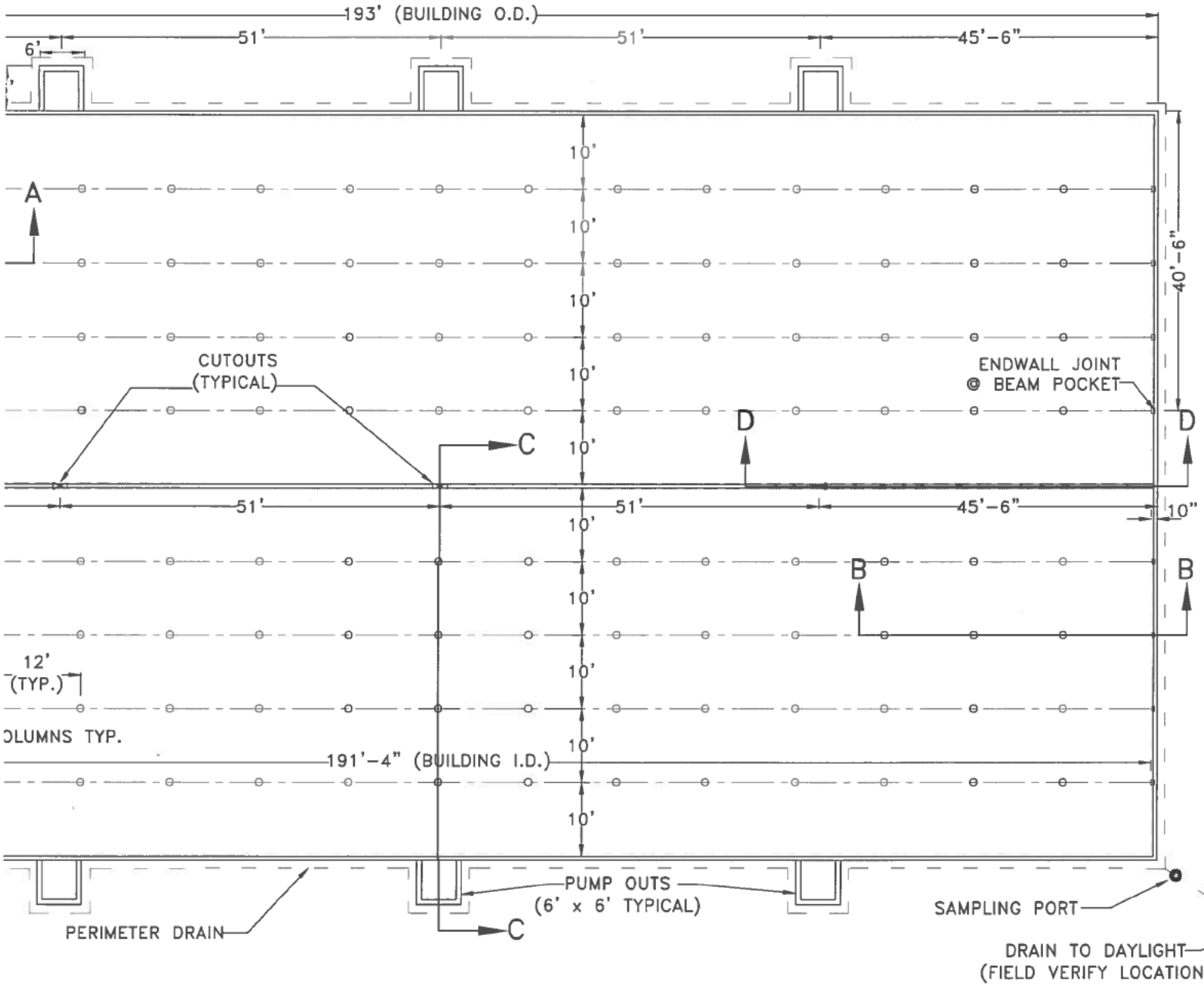
TABLE 1 RECOMMENDED CONCRETE TEMPERATURES

LINE	AIR TEMPERATURE	SECTION SIZE MINIMUM >72 In.(1800 mm)
1	–	40°F(5°C)
2	ABOVE 30°F(–1°C)	45°F(7°C)
3	0°–30°F(–18°to–1°C)	50°F(10°C)
4	BELOW 0°F(–18°C)	55°F(13°C)
5	–	20°F(11°C)

TABLE 2 LENGTI
CON

LINE	SERVICE CON
1	NO LOAD, NOT
2	NO LOAD, EXPO
3	PARTIAL LOAD,
4	FULL LOAD

*A DAY IS A 24 HOUR P



THE TITLE BLOCK.

2.) CONCRETE CONSTRUCTION SERVICE-36, CONCRETE M. OTHERWISE.

3.) NO CONCRETE SHALL BE F FOUNDATION MATERIAL. TH FOR ALL CONCRETE DAMAC REMOVE AND REPLACE AN' EXPENSE.

4.) THE METHOD AND MANNER SUCH AS TO AVOID SEGRE AGGREGATES OR THE DISPI

5.) THE FOOTINGS ARE TO BE 3,000 PSI CONCRETE.

6.) ALL WALLS, COLUMNS, ANI CONSTRUCTED OF 4,000 P

7.) CONCRETE SLATS WILL BE

8.) THE CONCRETE PAD WILL

9.) EXTERIOR WALL CONSTRUC 100' O.C. MAXIMUM. UNLE

10.) NO VEHICLE LOADS ALLOW PIT/GUTTER WALLS.

11.) ALL BEAMS SHALL BE BUT THE FULL WIDTH AND HEIC A MINIMUM COMPRESSIVE

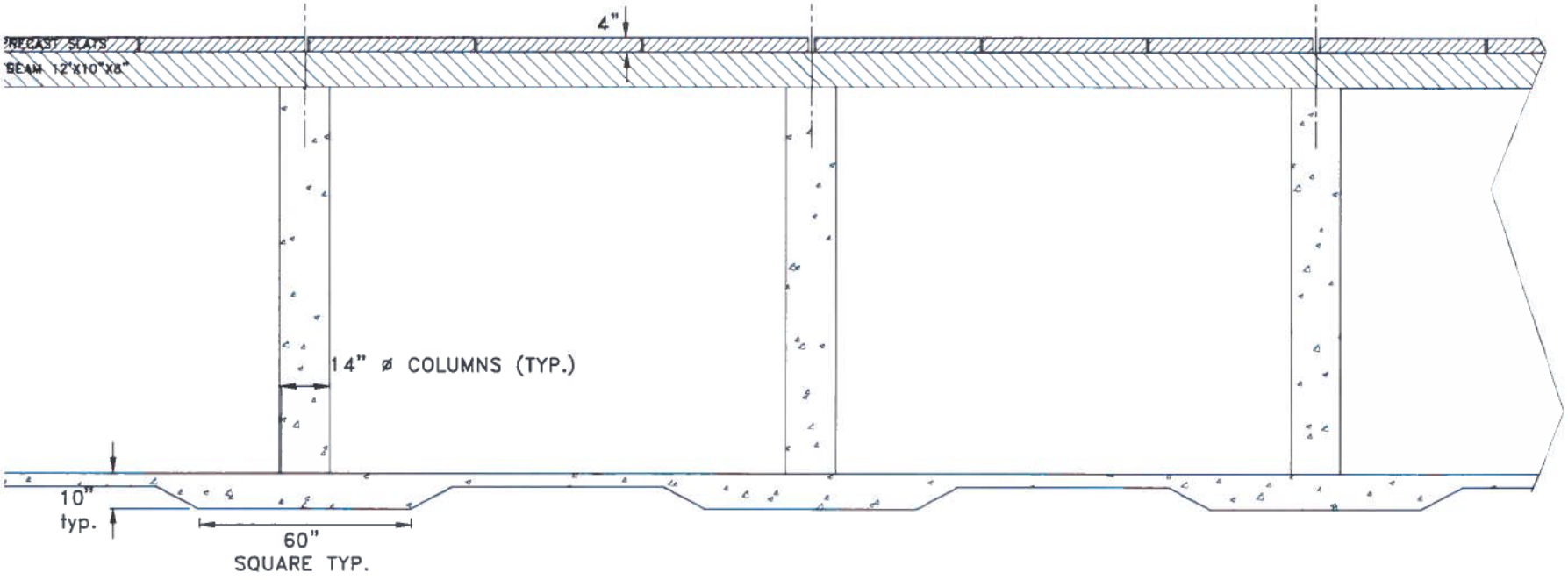
12.) ALL SLATS SHALL BE BUTT THE FULL LENGTH AND DE A MINIMUM COMPRESSIVE

13.) NO PIPE PENETRATIONS OT ON THESE DRAWINGS ARE PENETRATIONS, INCLUDING APPROVED BY THE PROJEC

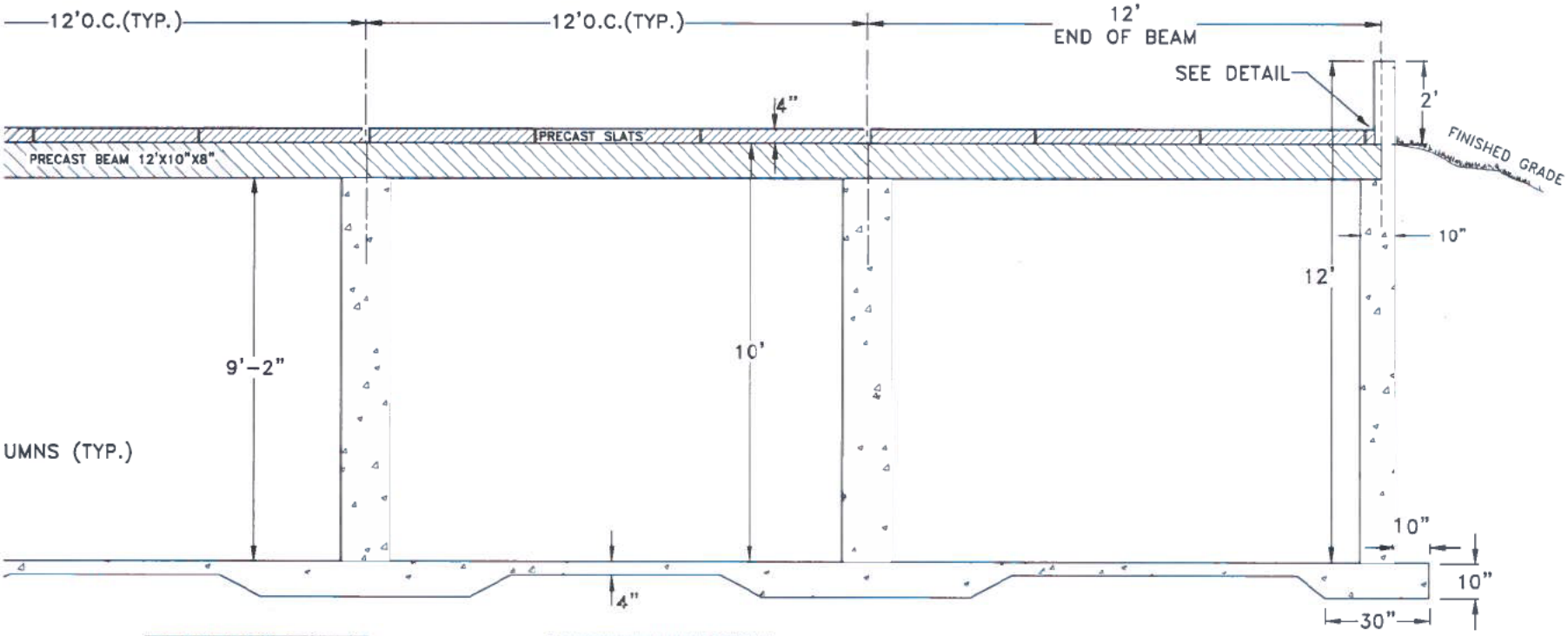
14.) THE PRESUMED SOIL BEARI BASED ON NRCS CODE 31

15.) THE DESIGN OF THIS BUILI THE 2,000 LBS./SQ. FT. S

16.) WATERSTOP SHALL BE INST MANUFACTURER INSTRUCTIC

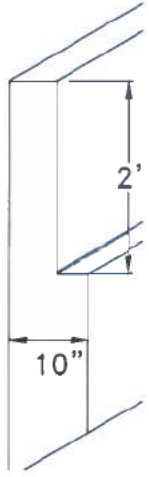


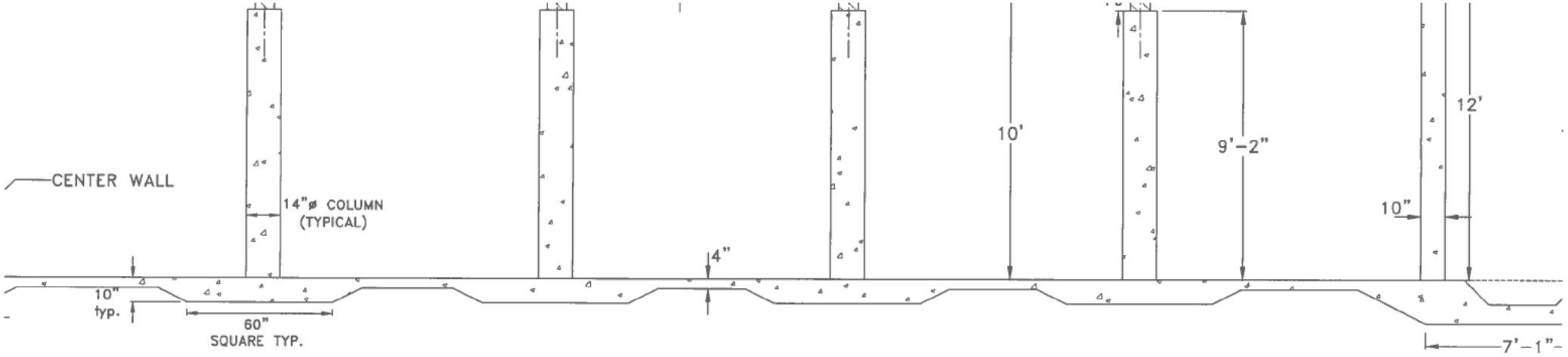
CROSS SECTION B–B



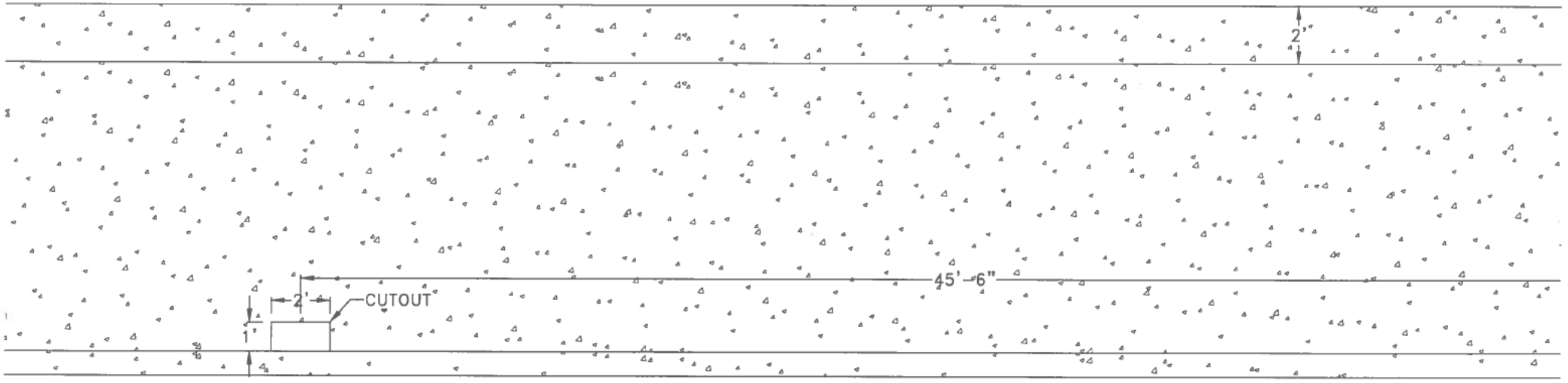
RED ON SITE PRECAST BEAMS PRECAST SLATS

TYPICAL E





CROSS SECTION D-D



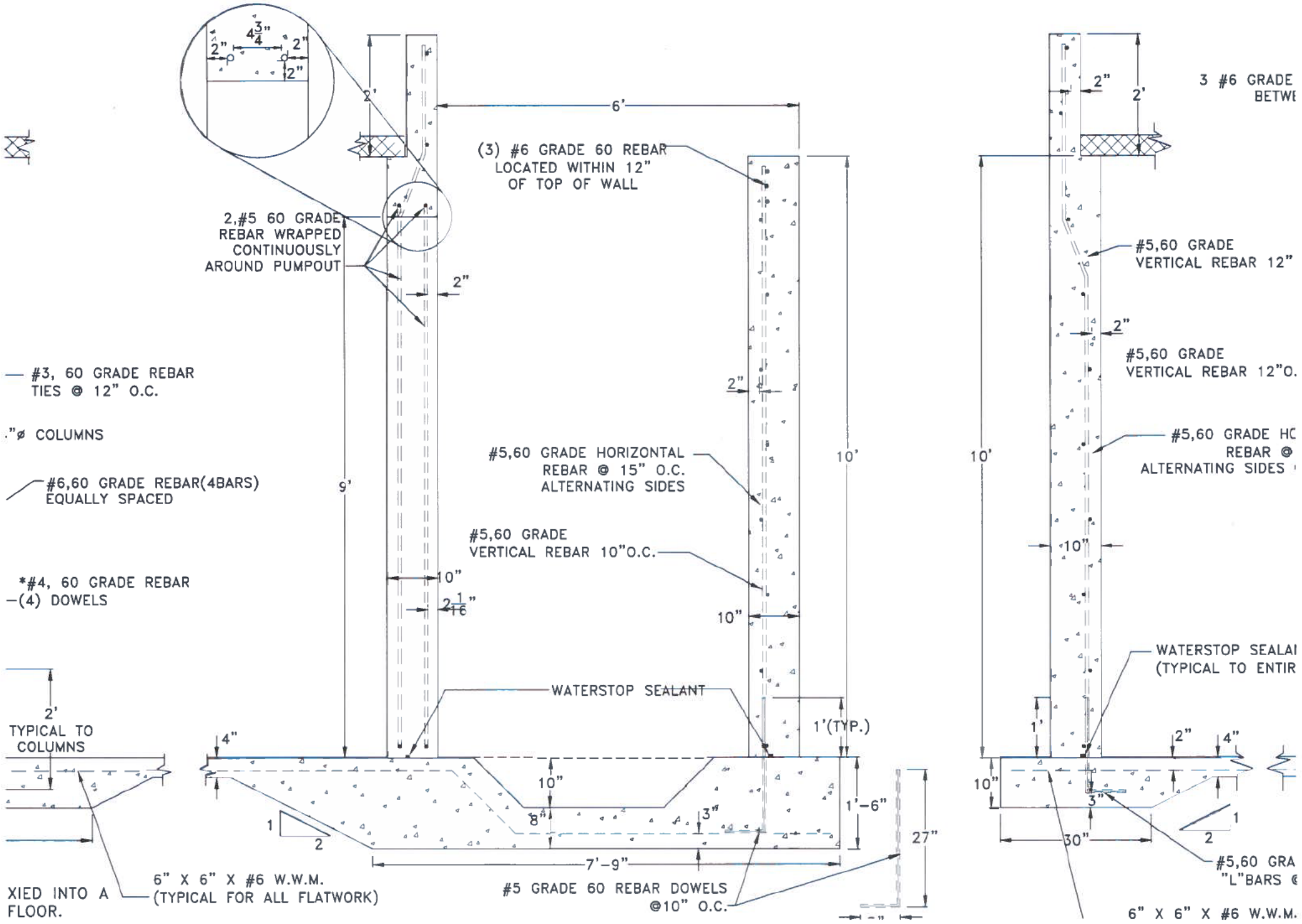
TYPICAL
NO SC

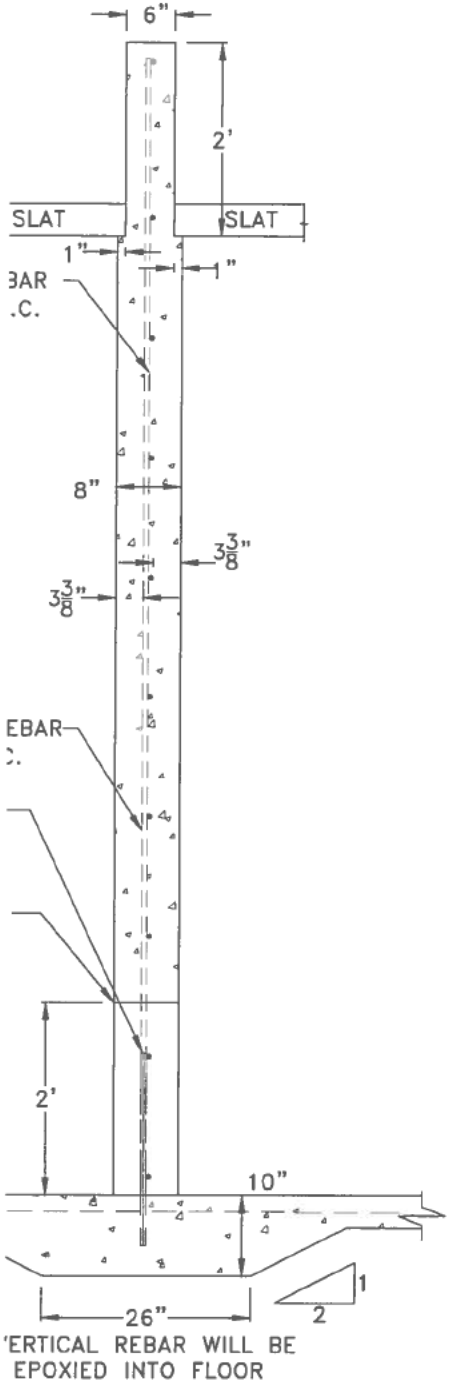
CE

;

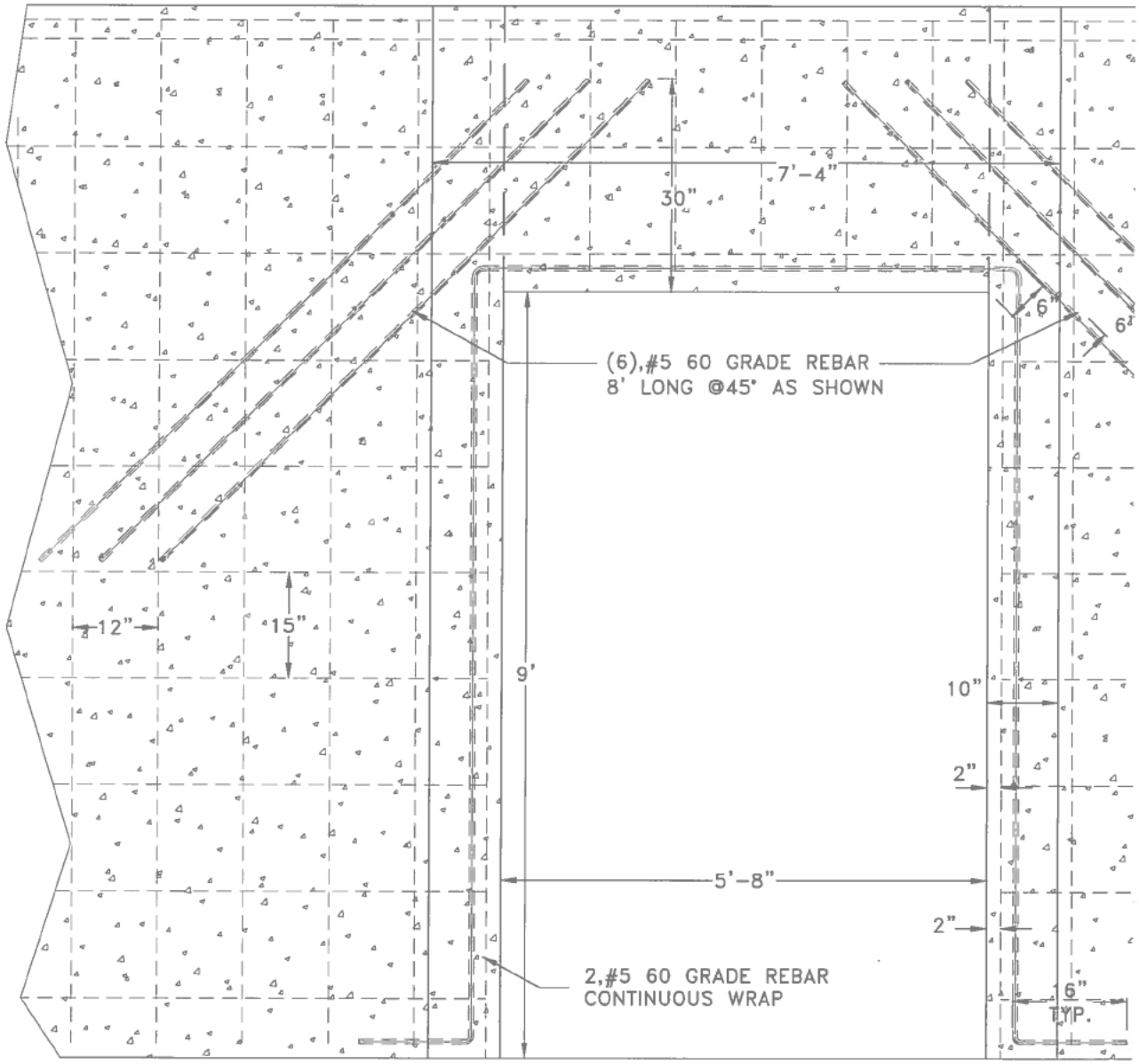
RED ON SITE

5'

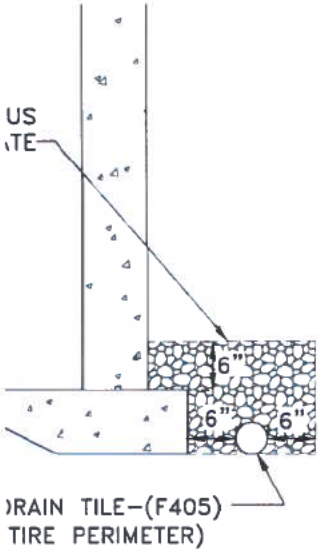

4 3/4"
2"
2"
2"
2'
6'
(3) #6 GRADE 60 REBAR
LOCATED WITHIN 12"
OF TOP OF WALL
2,#5 60 GRADE
REBAR WRAPPED
CONTINUOUSLY
AROUND PUMPOUT
2"
#3, 60 GRADE REBAR
TIES @ 12" O.C.
."ø COLUMNS
#6,60 GRADE REBAR(4BARS)
EQUALLY SPACED
9'
#5,60 GRADE HORIZONTAL
REBAR @ 15" O.C.
ALTERNATING SIDES
10'
#5,60 GRADE
VERTICAL REBAR 10"O.C.
*#4, 60 GRADE REBAR
-(4) DOWELS
10"
2 1/16"
10"
WATERSTOP SEALANT
1'(TYP.)
2'
TYPICAL TO
COLUMNS
4"
10"
8"
3"
1'-6"
1
2
7'-9"
27"
XIED INTO A
FLOOR.
6" X 6" X #6 W.W.M.
(TYPICAL FOR ALL FLATWORK)
#5 GRADE 60 REBAR DOWELS
@10" O.C.
3 #6 GRADE
BETWE
#5,60 GRADE
VERTICAL REBAR 12"
#5,60 GRADE
VERTICAL REBAR 12"O.
#5,60 GRADE HC
REBAR @
ALTERNATING SIDES
WATERSTOP SEALAI
(TYPICAL TO ENTIR
1'
30"
#5,60 GRA
"L"BARS @
6" X 6" X #6 W.W.M.

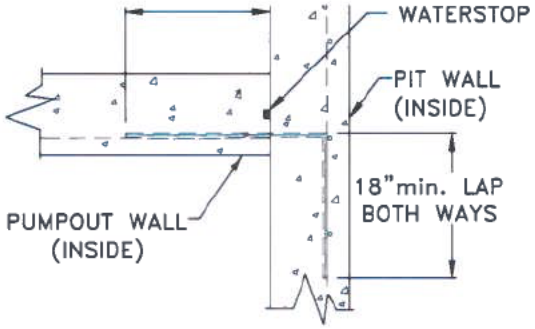


PUMPOUT OPENING DETAIL

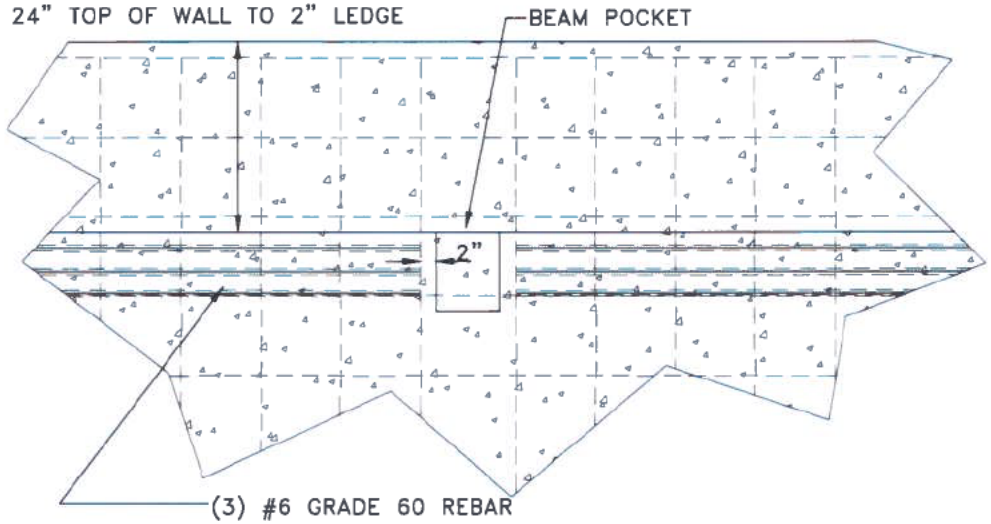


2'





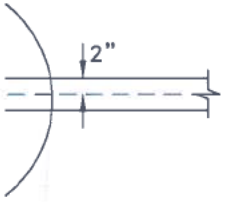
REINFORCEMENT DETAIL AT BEAM POCKET



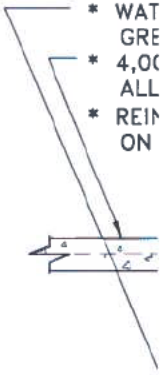
ION JOINT

ORK)

AS NEEDED



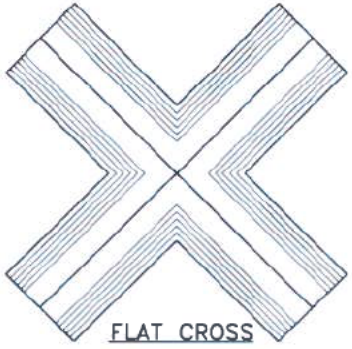
FLO



BASE SEAL & CENTER BULB WATERSTOP WELD DETAIL

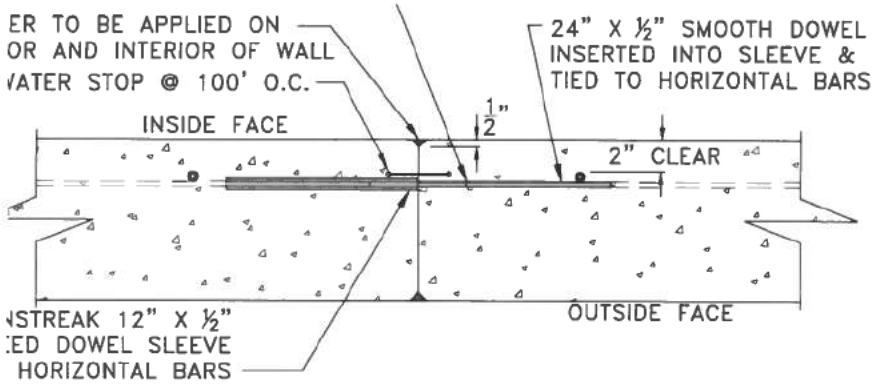
(NO SCALE)

–APPLIES TO NO OTHER WATERSTOP TYPES



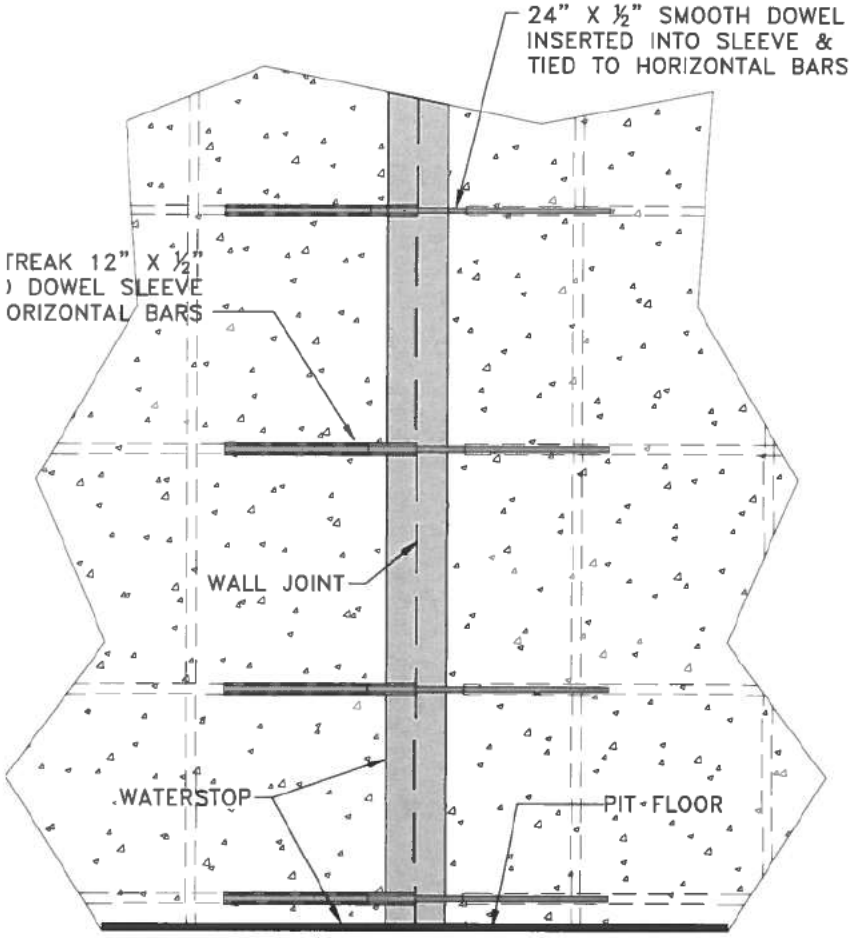
SPLICE FABRICATION:

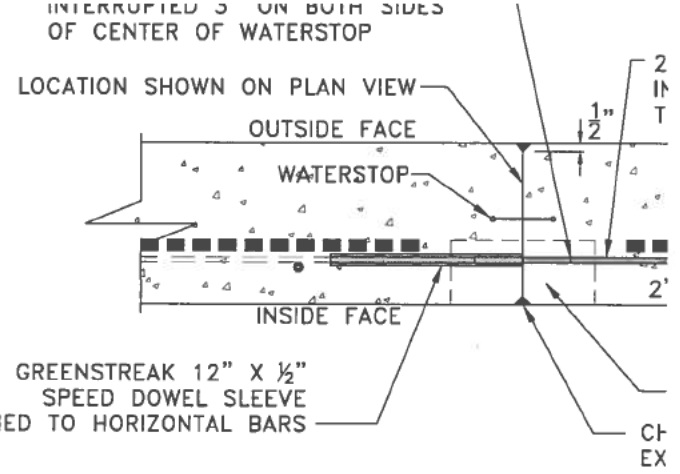
1.) PROVIDE FACTORY FABRICATED WATERSTOP CORNERS AND TRANSITIONS LEAVING ONLY STRAIGHT BUTT JOINT SPLICES FOR FIELD FABRICATION, UNLESS SPECIFICALLY APPROVED IN WRITING BY THE MANUFACTURER AND PERFORMED IN ACCORDANCE WITH THEIR SPECIFICATIONS.
2.) USE ONLY A SPLICING IRON SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR HEAT FUSED WELDING OF ALL SPLICES.
3.) WELDS ARE TO EXHIBIT A CONTINUOUS BEAD OF EXCESS MELTED MATERIAL, FREE OF DEFECTS.
4.) SPLICES ARE TO BE HEAT WELDED WITH THE CENTER BULB AND RIBS ALIGNED.
5.) ADHESIVES, SOLVENTS, LAP JOINTS, AND EDGE WELDING ARE NOT ACCEPTABLE.
6.) EMBEDDED WATERSTOPS MAY NOT BE WELDED OR JOINED TO OTHER WATERSTOPS OF DIFFERENT SIZE, CONFIGURATION, OR MATERIAL.
7.) ALL SPLICE FABRICATIONS SHALL BE PERFORMED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS



SIDEWALL JOINT SIDE VIEW

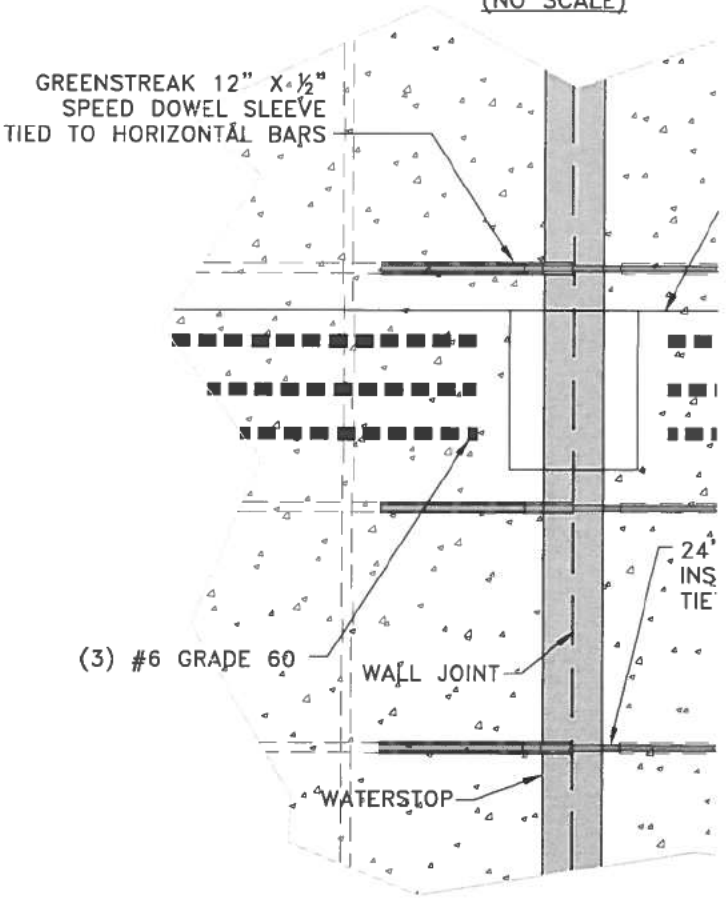
(NO SCALE)





ENDWALL JOINT SIDE

(NO SCALE)



2'

Appendix D

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To:
Consultation Code: 03E18000-2021-SLI-1469
Event Code: 03E18000-2021-E-03648
Project Name: Fanter Farms

May 05, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

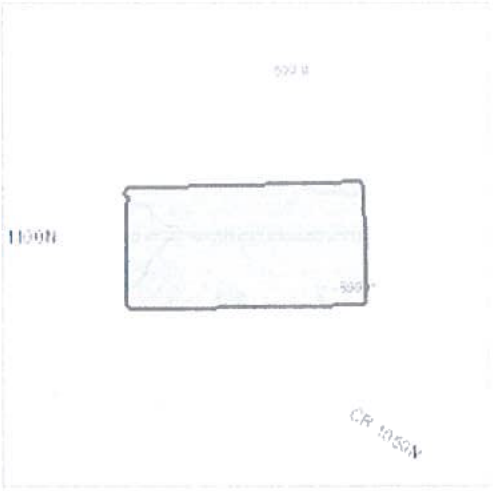
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
(309) 757-5800

Project Summary

Consultation Code: 03E18000-2021-SLI-1469
Event Code: 03E18000-2021-E-03648
Project Name: Fanter Farms
Project Type: AGRICULTURE
Project Description: Proposed 2400 head swine finishing building measuring 101' x 193' with a 10' deep manure storage pit.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.21691615,-89.98562585797981,14z



Counties: Mason County, Illinois

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Decurrent False Aster *Boltonia decurrens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705	Threatened
Eastern Prairie Fringed Orchid *Platanthera leucophaea* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

U.S. Fish & Wildlife Service

Threatened and Endangered Species

Although not very tolerant to prolonged flooding, this plant relies on periodic flooding to scour away other plants that compete for the same habitat.

Decurrent False Aster

(*Boltonia decurrens*)

The Decurrent False Aster is a federally *threatened species*. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. *Endangered species* are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

Habitat

This plant is found on moist, sandy floodplains and prairie wetlands along the Illinois River. It relies on periodic flooding to scour away other plants that compete for the same habitat.

Why It's Threatened

Excessive silting seems to be a major cause of the decurrent false aster's decline. Highly intensive agricultural practices have increased topsoil runoff, which smothers seeds and seedlings.

Habitat destruction is another threat. Agriculture has eliminated wet prairies and marshes within the species' range, natural lakes have been drained and converted to row crops. Building levees along rivers and draining wetlands for cultivation has also changed patterns of flooding and eliminated habitat. Herbicides also kill these plants and may be a factor in the decline of the species.

Several communities of decurrent false asters have been found in areas of low-intensity agriculture. Biologists believe that the plant may actually benefit from occasional farming, which eliminates competitive plant species.

U.S. Fish & Wildlife Service
Endangered Species Division
1 Federal Drive
Fort Snelling, Minnesota 55111-4056
612/713-5350
Federal Relay Service 1-800-877-8339
http://midwest.fws.gov/endangered
1997

U.S. Fish & Wildlife Service

Threatened and Endangered Species

Eastern Prairie Fringed Orchid

(*Platanthera leucophaea*)

States where the eastern prairie fringed orchid is found.

The eastern prairie fringed orchid is a federally threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

Photo by Mike Redmer

What is the eastern prairie fringed orchid?

The eastern prairie fringed orchid is 1 of at least 200 North American orchid species.

Appearance - This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers. Each flower has a three-part fringed lip less than 1 inch long and a nectar spur (tube-like structure) which is about 1 to 2 inches long.

Habitat Requirements - The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. This fungi helps the seeds assimilate nutrients in the soil.

Life History - This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators, though they are also at greater risk of being eaten by deer. Seed capsules mature over the growing season and are dispersed by the wind from late August through September.

What is the eastern prairie fringed orchid? (cont'd.)

Reproduction/Pollination - Night flying hawkmoths pollinate the nocturnally fragrant flowers of this white orchid. Visiting hawkmoths inadvertantly collect pollen on their proboscises as they ingest nectar from the flower's long nectar spurs.

Why is the eastern prairie fringed orchid threatened?

Historic Decline - Early decline was due to the loss of habitat, mainly conversion of natural habitats to cropland and pasture.

Current Decline - Current decline is mainly due to the loss of habitat from the drainage and development of wetlands. Other reasons for the current decline include succession to woody vegetation, competition from non-native species and over-collection.

What is being done to prevent extinction of the eastern prairie fringed orchid?

Listing - The eastern prairie fringed orchid was added to the U.S. List of Endangered and Threatened Species on September 28, 1989 which benefits the species by focusing attention and money on its conservation.

Recovery Plan - In September 1999 a recovery plan was completed by the U.S. Fish and Wildlife Service which delineates reasonable actions needed to recover and/or protect this orchid. The purpose of the plan is to promote the conservation of the threatened eastern prairie fringed orchid by implementing identified tasks.

Recovery Plan Actions - Protect habitat, manage habitat, increase size and numbers of populations, conduct surveys on known populations, conduct research, and review progress.

What can I do to help prevent the extinction of species?

Learn- Learn more about the eastern prairie fringed orchid and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Join – Join a conservation group; many have local chapters. Volunteer at a known orchid site to help with annual demographic data collection or to help with prescribed burns at these sites. Or volunteer at a local nature center, zoo, or wildlife refuge.

Protect – Protect remaining wetland areas by **not** filling them for residential or commercial development. Protect native plant species: do not plant non-native invasive plant species in your gardens or landscape projects. Protect water quality by minimizing use of lawn chemicals (i.e., fertilizers, herbicides, and insecticides), recycling used car oil, and properly disposing of paint and other toxic household projects.

The Eastern Prairie Fringed Orchid Recovery Plan and additional species information can be found at http://midwest.fws.gov/endangered. **Copies of the recovery plan may be purchased by contacting the** Fish and Wildlife Reference Service at 5430 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814, or by phone 1-800-582-3421 or 301-492-6403 or on the Internet at http://fa.r9.fws.gov/r9fwrs/.

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
1250 South Grove St., Ste. 103
Barrington, Illinois
847-381-2253
Federal Relay Service 1-800-877-8339
http://midwest.fws.gov/Chicago
2005

Appendix E

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

JB Pritzker, Governor
Colleen Callahan, Director

www.dnr.illinois.gov

Mailing address: State Historic Preservation Office, 1 Old State Capitol Plaza, Springfield, IL 62701

Mason County
Havana
County Road 1100 N east of E. CR 1920 N
Section:3-Township:20N-Range:8W
IDOA, USDA FSA
New construction, livestock management & waste handling facility - Fanter Farms

PLEASE REFER TO: SHPO LOG #002030821

April 21, 2021

John Gehrke
U.S. Department of Agriculture
Farm Service Agency
3500 Wabash Ave.
Springfield, IL 62711-8287

Dear Mr. Gehrke:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance. If further assistance is needed contact Jeff Kruchten, Chief Archaeologist at 217/785-1279 or Jeffery.kruchten@illinois.gov.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

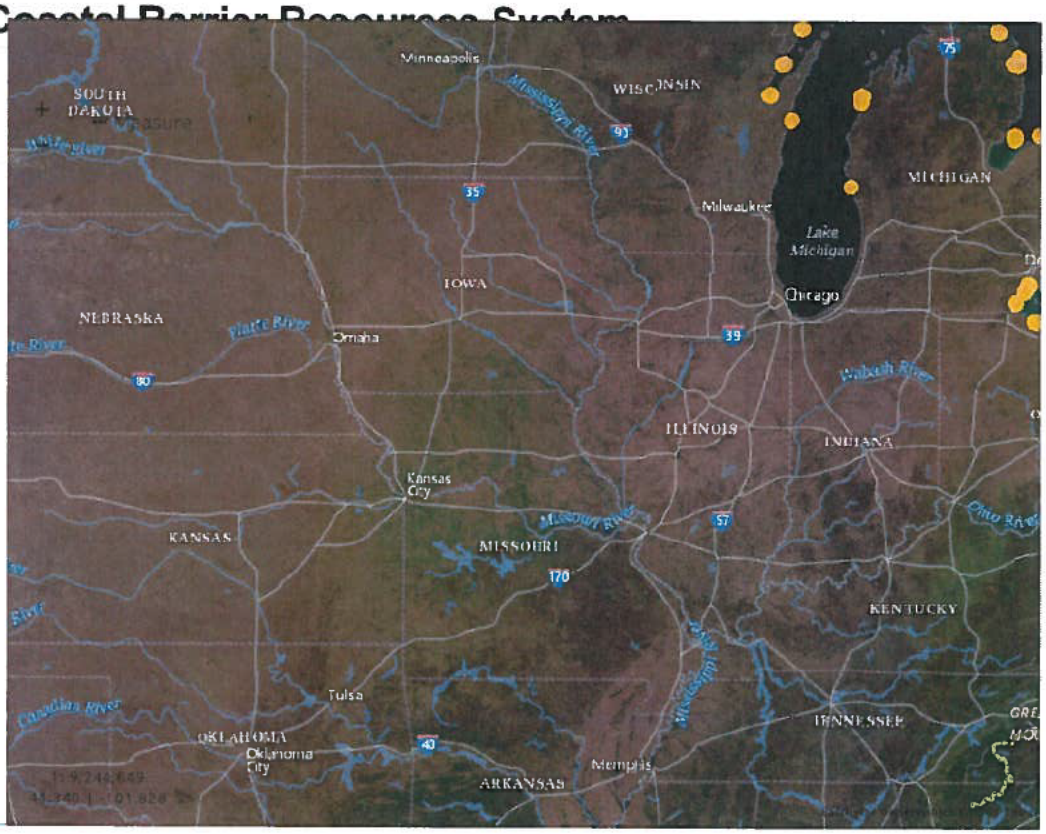
Appendix F

Coastal Barrier Resource Systems

CBRS Mapper U.S. Fish and Wildlife Service

Coastal Barrier Resources System

BASEMAPS
CBRS Menu
MAP LAYERS
CBRS Home
CBRS Units Legislation & Testimony
Click here to learn more about CBRS Units.
Historical Changes
CBRA Prohibitions
Flood Insurance
Official Maps and Data +
Boundary Modifications
Mapping Projects +
CBRS Documentation
Project Consultations +
Help and Contacts



Last updated: March 15, 2019

Frequently Asked Questions

Glossary

Documents Library

Contact Us

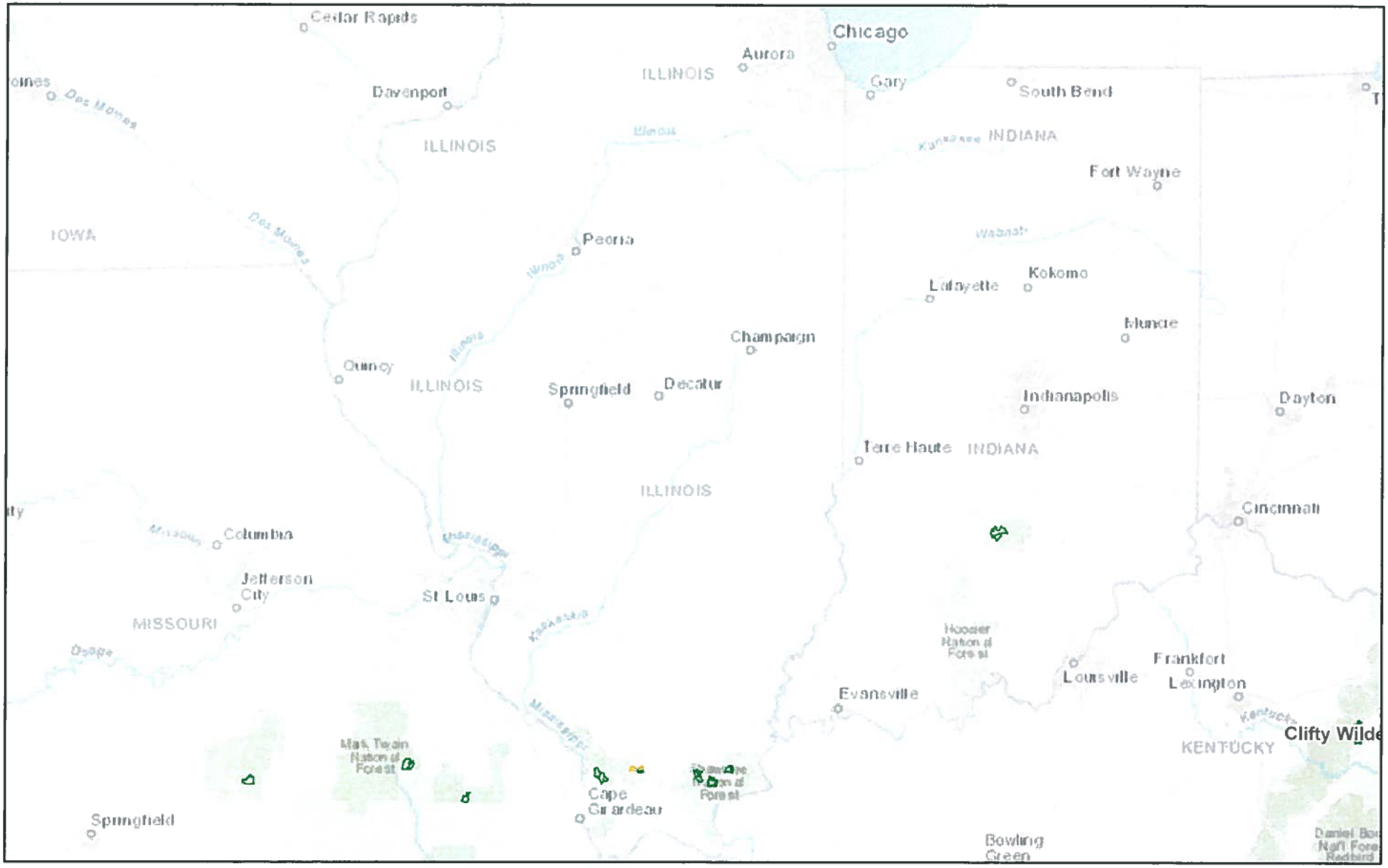
For CBRA news, sign up for our listserv electronic mailing list

Appendix G


Illinois Coastal Area
Winthrop Harbor
Illinois Beach State Park North Unit
Zion
Wadsworth
Beach Park
Illinois Beach State Park South Unit
Waukegan
Waukegan Harbor
North Chicago
Lake Bluff
Lake Forest
Boundary extends to the Illinois Lake Michigan border
Highwood
Highland Park
Glencoe
Winnetka
Kenilworth
Wilmette
Evanston
Skokie
North Shore Channel
Lincolnwood
Junction of Chicago River and North Shore Channel
Chicago River North Branch
Chicago
Chicago River South Branch
Chicago
William Powers State Recreation Area
Calumet Park
Riverdale
Burnham
Dolton
Blue Island
Calumet City
Illinois Coastal Area Boundary
Ravines
Coastal Communities
Millennium Reserve: Calumet Core
N

Appendix H

Wilderness Map



5/23/2019 11:32:58 AM

1:4,622,324

0 30 60 120 mi

0 45 90 180 km

Wilderness Areas

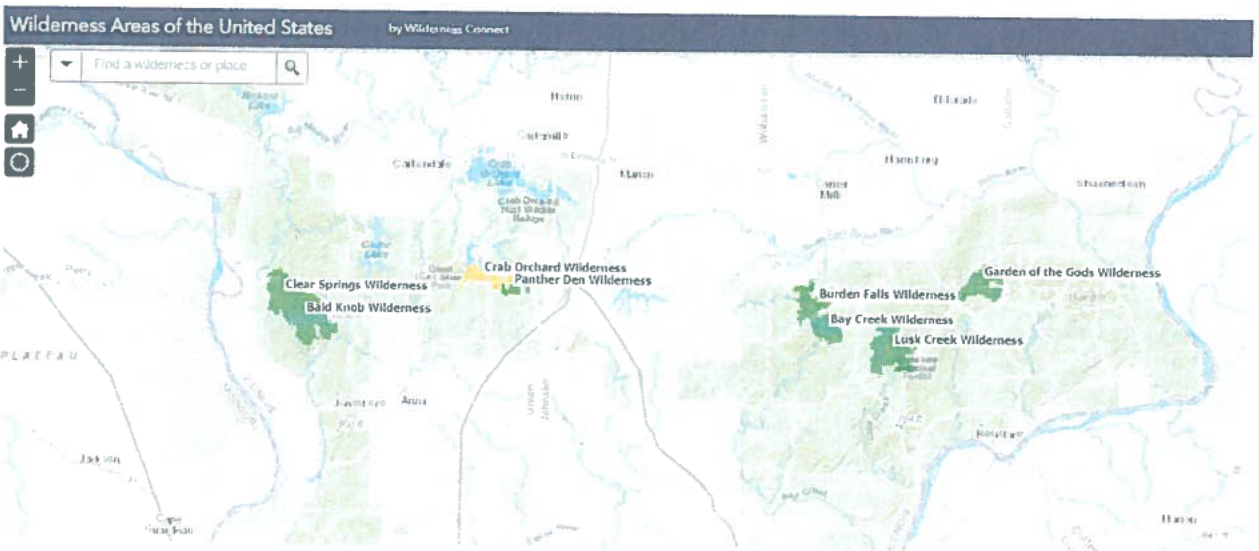
Forest Service

Fish and Wildlife Service

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

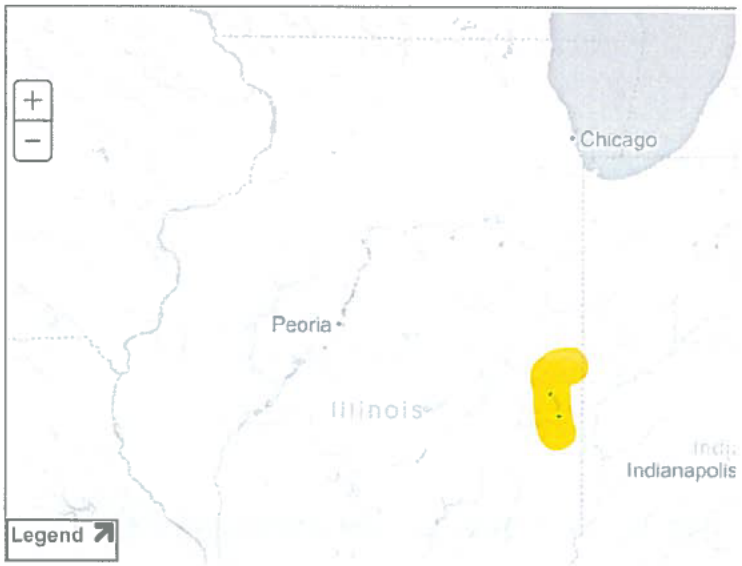
Web AppBuilder for ArcGIS

http://www.wilderness.net/NWPS/stateView?state=IL



Appendix I

VERMILION RIVER (MIDDLE FORK), ILLINOIS



+ View larger map

Choose A State Go
Choose A River Go

Nourished by the fertile soils of the region, rivers of the Midwest explode with life, from great avian migrations to ancient fishes

Managing Agency:

Illinois Department of Natural Resources

Designated Reach:

May 11, 1989. From river mile 46.9 near Collison downstream to river mile 29.8 at the Conrail Railroad crossing north of U.S. Highway 150.

Classification/Mileage:

Scenic — 17.1 miles; Total — 17.1 miles.

RELATED LINKS

Vermilion Scenic River (Illinois Department of Natural Resources)

Middle Fork Citizens' Organization

Vermilion River (Prairie Rivers Network)

Photo Credit Thomas O'Keefe

Vermilion River (Middle Fork)

The river meanders deeply through Illinois' Grand Prairie glacial deposits, exposing scenic, steep, valley slopes with high bluffs of geological note. The valley's unique flora and fauna are highlighted in several adjacent natural areas and nature preserves, both forested and prairie, along with the river's recreational and historical characteristics. The majority of the designated river segment is publicly owned with a wide variety of access opportunities.

Appendix J

National Natural Landmarks by x +

https://www.nps.gov/subjects/nnlandmarks/state.htm?State=IL

National Natural Landmarks

Home | Directory | FAQs | Multimedia | NNL Stories | 21st Century Designations | Outreach Materials

National Natural Landmarks by state

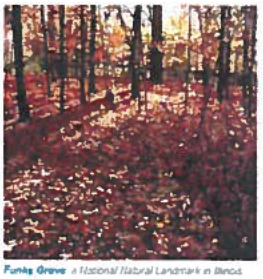
Illinois

There are 18 National Natural Landmark sites located within the state of Illinois. Natural features represented include large river and small stream valley ecosystems, diverse glacial landforms, and remnants of forest and prairie communities that once dominated the Illinois landscape. The sites in Illinois received NNL designation between 1965 and 1987. The sites range in size from 53 acres to over 6,500 acres and are owned by a variety of landowners including the U.S. Forest Service, Illinois Department of Natural Resources, the University of Illinois, County Forest Preserve Districts, The Nature Conservancy and private individuals.

Below is a **map of sites in Illinois**.

National Natural Landmark sites are located in the following counties: **Alexander**, **Carroll**, **Cook**, **Jackson**, **Johnson**, **Lake**, **McLean**, **Monroe**, **Piatt**, **Pope**, **Pulaski**, **Union**, and **Wabash**.

- **Back to listing of all states and territories.**



Funks Grove, a National Natural Landmark in Illinois

To learn more about National Natural Landmarks in Illinois, select a site from the list or the map below:

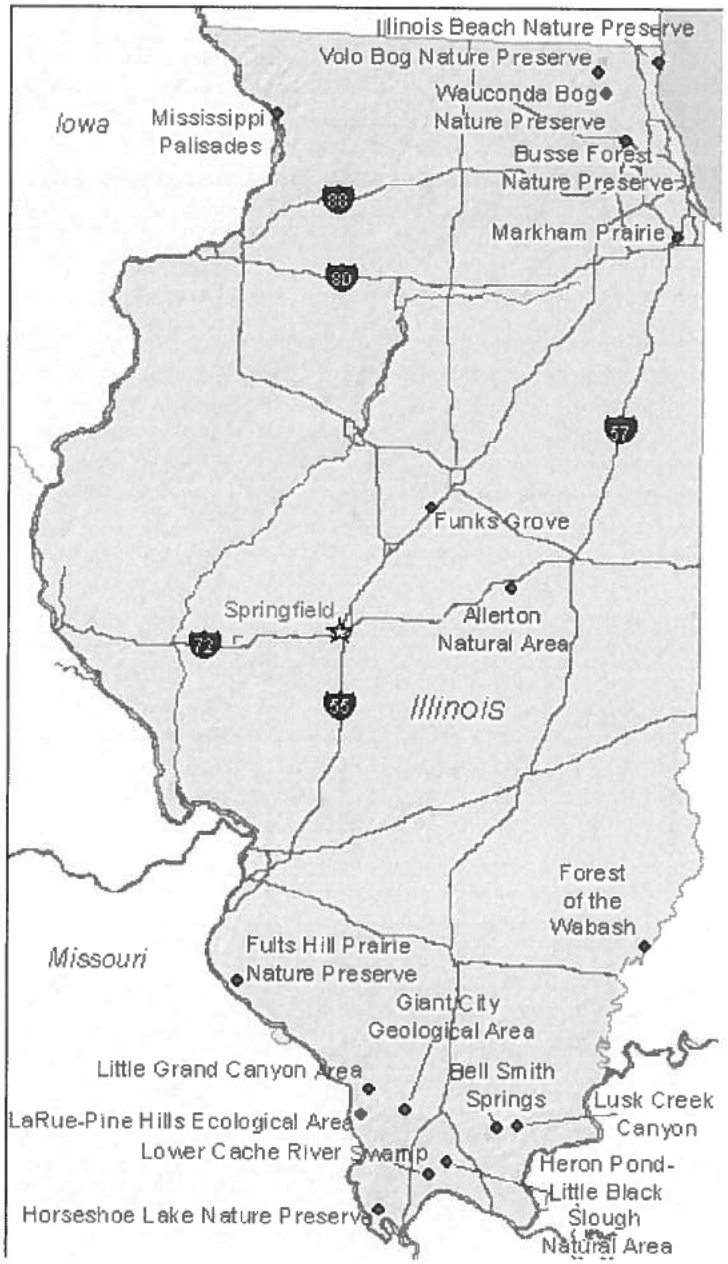
Funks Grove | Go!

National Natural Landmarks by x +

https://www.nps.gov/subjects/nnlandmarks/state.htm?State=IL

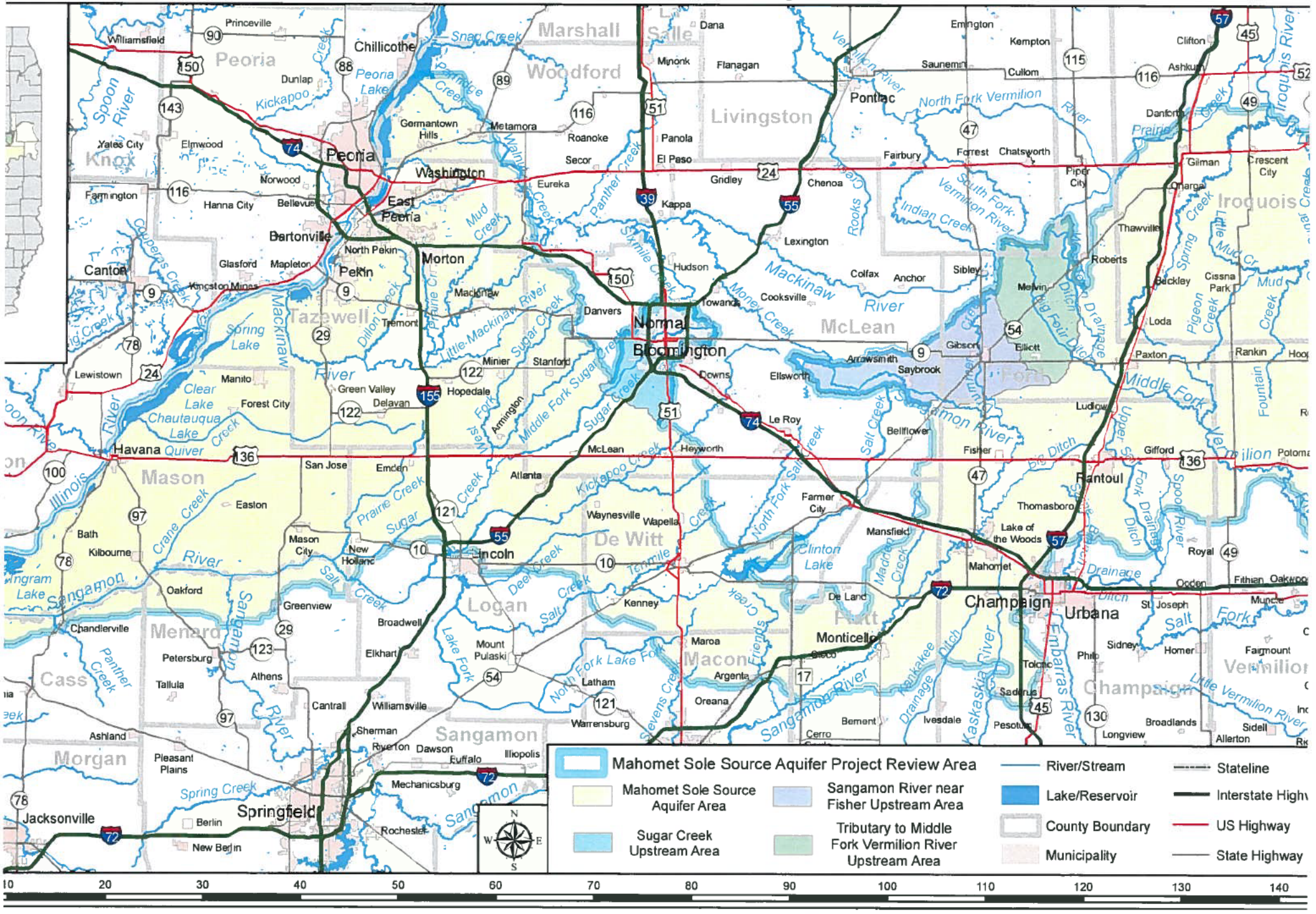
Funks Grove | Go!

Please remember, National Natural Landmarks (NNLs) are not national parks. NNL status does not indicate public ownership, and many sites are not open for visitation.


Illinois Beach Nature Preserve
Volo Bog Nature Preserve
Wauconda Bog
Nature Preserve
Busse Forest
Nature Preserve
Markham Prairie
Iowa
Mississippi
Palisades
88
80
57
Funks Grove
Springfield
72
Allerton
Natural Area
55
Illinois
Forest
of the
Wabash
Missouri
Fults Hill Prairie
Nature Preserve
Giant City
Geological Area
Little Grand Canyon Area
Bell Smith
Springs
Lusk Creek
Canyon
LaRue-Pine Hills Ecological Area
Lower Cache River Swamp
Heron Pond-
Little Black
Slough
Natural Area
Horseshoe Lake Nature Preserve

Appendix K

Mahomet Sole Source Aquifer Project Review Area



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

12 August 2021 [via email]

John W. Gehrke
Farm Loan Chief
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
john.gehrke@usda.gov

Re: Sole Source Aquifer Project Review
New Livestock Operation and Associated Animal Waste Management
Mason County, IL

Dear Mr. Gehrke:

I have reviewed the information you provided regarding the above-referenced project. The proposed hog barn and associated manure application sites are located within the Mahomet Sole Source Aquifer (SSA), which EPA has designated under the authority of the Safe Drinking Water Act, Section 1424(e). Animal wastes can be a source of pathogens (e.g., coliform bacteria) and other contaminants (e.g., nitrate), which can leach down and contaminate groundwater. Areas with sandy soils, such as the area in Mason County in which the proposed barn and land application sites are to be located, are particularly vulnerable. In a phone conversation in July 2021, Illinois EPA Source Water Protection staff also highlighted the lack of a protective clay confining layer as another reason why groundwater in this area is vulnerable.[1] To protect the groundwater beneath and adjacent to the proposed hog barn and associated manure application sites, the owner(s) and operator(s) must implement best management practices. A list of recommended best management practices is provided below.

The livestock operation and animal waste management must be designed, constructed, and operated so as to minimize nonpoint source pollution entering groundwater.

[1] Use of Real-Time Sensors to Temporally Characterize Water Quality in Groundwater and Surface Water in Mason County, Illinois, 2017–19: https://pubs.er.usgs.gov/publication/sir20205108

- A registered professional engineer should certify the construction of the manure storage facility (concrete pit) and the mortality management and composting areas, to minimize leaching or discharge of liquids to the groundwater. Prior to this certification, the applicant must inform the engineer that the location is within an EPA-designated Sole Source Aquifer. Design certification has been provided in accordance with state requirements intended to prevent seepage or groundwater contamination (e.g., 8 IAC 900.502(c); 510 ILCS 77/13(b)(3); and 35 IAC 501.402(g)).
- We strongly recommend the owner/operator (or designee) complete periodic inspections[2] of the concrete floor and walls of the manure management facility, such as each time the manure is emptied for land application. Additionally, pump-outs should be inspected periodically to ensure covers are intact, so as to prevent inflow of rainwater and ensure adequate freeboard is maintained to prevent manure overflow.
- We understand that perimeter foundation drain monitoring (e.g., for nitrate-N, phosphate-P, chloride, sulfate, ammonia-N) will be required by the State of Illinois (State) upon initiation of the project and strongly recommend that such monitoring be continued periodically as long as the facility is in operation. Ongoing perimeter foundation drain monitoring is recommended to help identify, and quickly mitigate, any animal waste impacts to groundwater as the barn and foundations age (e.g., if cracks develop in the concrete or the waterstop material). We note that the plans call for water from the perimeter foundation drain to be gravity-drained or pumped to daylight; the owner/operator or designee should periodically inspect the foundation drain receiving outlet for animal waste impacts.
- The owner/operator should notify the State regarding any indication of manure or animal waste release to groundwater (510 ILCS 77/18).
- Any pre-application staging of manure outside of the manure waste management system (concrete pit) should be limited to very short durations and only within areas that will limit seepage into groundwater (e.g., concrete pad) and that will limit stormwater run-off or run-on (e.g., berms / covers). Likewise, mortality management compost, which is planned to be on an inwardly-sloped concrete pad with a cover to prevent stormwater influx, should be properly managed so that contaminants will not leach into groundwater.

Careful land application is particularly important given the sandy soils in the project area. If too much manure is applied, excess nitrogen will convert to nitrate, which can leach downward and contaminate the groundwater.[3,4]

---

[2] See Chapter 13 of the NRCS Agricultural Waste Management Field Handbook, as well as NRCS Conservation Practice Standard Code 313, Waste Storage Facility, and associated Operation & Maintenance Plan.

[3] 35 IAC 560.203, Excerpt: "Caution should be exercised in applying wastes, particularly on porous soils, so as not to cause nitrate or bacteria contamination of ground waters. Such shallow ground waters are often the source of private wells in rural areas."

[4] See also Illinois NRCS Nitrogen Management Guidelines.

- The applicant should inform any other parties (including contractors and land owners) who accept, handle, or transport the manure from the facility that the area is underlain by sensitive groundwater (the Mahomet SSA).
- The applicant should not land apply (including by injection and incorporation methods) manure during rainfall (35 IAC 560.207) or when the ground is saturated, frozen, or snow-covered (35 IAC 560.206) at any site above the Mahomet SSA.
- The applicant should land apply manure as close to planting time as possible, i.e., in the spring or, if a cover crop will be planted, in early fall – when a crop that will use the nutrients is planted. Based on the storage capacity described in the facility's application (12 months), this should be achievable. Planting of fall/winter cover crops should be encouraged.[5]
- When conditions allow (i.e., not saturated, frozen, or snow-covered AND when a crop will be present), land application of manure should target the root zone and enhance plant uptake and reduce losses (e.g., run-off, vapors, and leaching to groundwater).[6] The owner / operator or designee should consider using slower application speeds, split applications, and injection equipment which have been reported to reduce nutrient leaching to below the root zone.[7,8]
- A comprehensive Nutrient Management Plan (NMP) should be maintained and implemented (e.g., soil characteristics[9], manure and soil nutrient testing, crop rotations, and manure application records)[10] for each land application site above the Mahomet SSA. We understand that the State of Illinois does not require NMP for operations with less than 1000 animal units, but voluntarily complying with requirements for large operations (e.g., 8 IAC 900 Subpart H) is strongly recommended to protect the sensitive groundwater in this area. We understand the applicant, with assistance from experienced professionals, intends to develop their nutrient management plan during the first year following construction.
- Application rates should be limited based on the results of nitrogen leaching risk assessment(s)[11], in addition to the requirements in 8 IAC 900.801 and 510 ILCS 77/20. A nitrogen leaching assessment should be completed for each land application field over the Mahomet SSA to determine the amount of nitrogen that the soil can handle at different times of the year to ensure protection of the SSA. Other sources that contribute nitrogen and phosphorus to the soil (e.g., crop rotation, other fertilizers) should be considered, and realistic yield goals should be used.

---

[5] According to the 2019 Illinois Nutrient Loss Reduction Strategy report, cover cropping can be one of the most effective in-field strategies for reducing both nitrate-nitrogen and total phosphorus loss, including reducing downward leaching. https://www2.illinois.gov/epa/topics/water-quality/watershed-management/excess-nutrients/Documents/NLRS-Biennial-Report-2019-Final.pdf

[6] Illinois Agronomy Handbook, including Chapter 9 Managing Nitrogen http://extension.cropsciences.illinois.edu/handbook/pdfs/chapter09.pdf

[7] https://extension.umn.edu/manure-management/manure-application-methods-and-nitrogen-losses

[8] https://uwdiscoveryfarms.org/wp-content/uploads/sites/1255/2020/07/Managing-Tile-Drained-Landscapes.pdf

[9] See, for example, Chapter 4 of the NRCS Agricultural Waste Management Field Handbook

[10] See also NRCS Conservation Practice Standard Code 590, Nutrient Management, and associated resources.

[11] NRCS Part 302 – Nutrient Management Policy Implementation

- For any tiled fields, the applicant should apply manure only when the soil is relatively dry. Managing drainage water by raising drain outlets before manure application is also recommended to reduce transport of contaminants.
- For irrigated fields, good water management is needed to prevent excessive leaching of soluble nutrients such as nitrate, and any additional irrigation to leach salts from soils should be timed to minimize the leaching of nitrates.[12]
- Periodic groundwater monitoring is recommended (such as at the on-site irrigation well as described below), so that the owner(s) and operator(s) can implement corrective actions if any impacts, such as increasing contaminants (e.g., nitrates, nitrites, coliform bacteria), are observed in groundwater downgradient of the sites where manure is land applied.[13]

The adjacent land application site includes an existing irrigation water well. It is important that all wells are properly located, installed, and maintained to prevent the well from becoming a pathway for contamination into the groundwater.

- When a well is no longer needed, it must be properly sealed.
- The applicant should confirm all areas where manure will be produced, handled, or stored are at a lower elevation than the water well location(s), or provide for other means (e.g., raised casing, berms) to prevent contaminated run-off from contaminating the well.
- Periodic sampling of the water well is recommended to evaluate groundwater quality (e.g., nitrates, nitrites, coliform bacteria).

If best management practices, including those listed above, are followed, this project is not likely to contaminate the Mahomet Sole Source Aquifer, designated under the authority of the Safe Drinking Water Act, Section 1424(e), so as to create a significant hazard to public health. We request that USDA-FSA, prior to loan approval, ask the farmer applicant to confirm in writing their receipt, understanding, and intention to make good faith efforts to implement the recommendations in this letter. Subsequent implementation could be via incorporation of these best management practices into their nutrient management plan.

As always, we suggest that during construction and maintenance, appropriate safeguards and best management practices are in place to ensure that local ground water supplies and neighboring drinking water wells are not endangered. Such precautions could include notifying general contractors that the site is sensitive, using "green infrastructure" practices where possible to reduce potential impacts of stormwater run-off, securing adequate precautions for fueling/servicing large equipment, and developing contingency plans to handle the release of any hazardous materials.

Please inform the Region 5 Sole Source Aquifer Program if future developments significantly change the scope or potential impacts of the project.

---

[12] Chapter 11 of the NRCS Agricultural Waste Management Field Handbook
[13] See also NRCS Conservation Practice Standard Code 353, Monitoring Well

This correspondence only addresses the Sole Source Aquifer Program. The project is responsible for ensuring compliance with any other federal, state, and local environmental requirements. EPA reserves its authority under the Safe Drinking Water Act and other federal law.

Thank you for your cooperation. If you have any further questions, please contact me by email at bosscher.valerie@epa.gov or call me at (312) 886-6731.

Sincerely,
VALERIE BOSSCHER
Digitally signed by VALERIE BOSSCHER
Date: 2021.08.12 15:34:48 -05'00'
Val Bosscher
Sole Source Aquifer Coordinator
Ground Water and Drinking Water Branch

Appendix L

Flood map 17125C0325D

PIFI
Approximate location based on user input and does not represent an authoritative property location

MAP PANELS
Selected Floodzap Boundary
Digital Data Available
No Digital Data Available
Unmapped

OTHER AREAS
NO SCREEN Area of Minimal Flood Hazard Zone X
Effective LOMRs
Area of Undetermined Flood Hazard Zone D
Otherwise Protected Area
Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A, V, A99
With BFE or Depth
Regulatory Floodway Zone AE, AO, AH, VE, AR

OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee. See Notes. Zone X
Area with Flood Risk due to Levee Zone D

OTHER FEATURES
Cross Sections with 1% Annual Chance
Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

Share This Page

Appendix M

United States Department of Agriculture
Natural Resources Conservation Service

NRCS-CPA-026-WC
September 2020

CERTIFIED WETLAND DETERMINATION

Clear Form

1. Name:	[redacted]	2. Location County: Mason	
3. Address:	[redacted] Havana, IL 62644	4. Admin. County: Mason	
5. Request Form:	AD-1026	6. Farm Number: [redacted]	
7. Request Date:	01/26/2021	8. Tract Number: [redacted]	

This certified wetland determination identifies areas subject to the wetland conservation provisions of the 1985 Food Security Act, as amended. See the attached Definitions of Wetland Labels and Uses for additional information and currently authorized activities under the Act.

Field	Label	Occurrence Year (CW+YEAR)	Acreage
15	NW		4.1

9. Remarks:

I certify that the above determinations are sufficient for the purpose of making a determination of eligibility for program benefits and were conducted in accordance with policies and procedures contained in the National Food Security Act Manual.

10. Signature Designated Conservationist	Date:
MARK JACOB Digitally signed by MARK JACOB Date: 2021.02.16 12:55:01 -06'00'	02/16/2021

Definitions of Wetland Labels and Uses

Label/Name	Criteria for Determination	Authorized Uses	Authorized Maintenance
AW (Artificial Wetland)	An area that was formerly a non-wetland area under natural conditions but now exhibits wetland characteristics because of the influence of human activities. These areas are exempt from the Food Security Act of 1985, as amended. This label includes irrigation induced wetlands.	No restrictions.	No restrictions.
CPD (Corps of Engineers (USACE) Permit with Mitigation)	A converted wetland authorized by a permit issued under Section 404 of the Clean Water Act by USACE.	Per USACE permit conditions.	Per USACE permit conditions
CW (Converted Wetland)	A wetland converted between December 23, 1985, and November 28, 1990.	Planting of agricultural commodities or additional manipulation will cause ineligibility.	Maintenance allowed to scope and effect of original manipulation.
CW (Wetland converted by county, drainage district, or similar entity)	Wetlands converted after December 23, 1985, by a county, drainage district, or similar entity and beyond a person's direct control, but not considered third party (TP).	Production of an agricultural commodity or forage for mechanical harvest or additional manipulation will cause ineligibility for USDA program benefits.	Maintenance allowed to original scope and effect of system before conversion.
CW+Year (Converted Wetland)	A wetland converted after November 28, 1990. "Year" indicates the year the wetland was converted, and ineligibility begins.	USDA program participant and their affiliated persons are ineligible for benefits (regardless of whether ag commodity planting occurred) until the wetland is restored or mitigated. Planting of agricultural commodities is also prohibited.	Not applicable
CWTE (Converted Wetland Technical Error)	An area converted after December 23, 1985, where the conversion or production of an agricultural commodity was a consequence of an incorrect NRCS determination.	May be used for production of agricultural commodities or forage provided no manipulation is done beyond what existed on the date of the CWTE determination.	May be maintained to the extent that existed on date of the CWTE determination.
FWP (Farmed Wetland Pasture and Hayland)	Manipulated and used for pasture or hay before December 23, 1985 and in most years, is inundated for at least 7 consecutive days or saturated for 14 days during the growing season.	Area may be farmed and maintained as existed before December 23, 1985, as long as area is not abandoned (cessation for five consecutive years of management or maintenance operations related to the use of a farmed wetland).	May be maintained to the extent that existed before December 23, 1985.

Definitions of Wetland Labels and Uses

Label/Name	Criteria for Determination	Authorized Uses	Authorized Maintenance
FW (Farmed Wetland)	A wetland that was manipulated and planted before December 23, 1985, but still meets inundation or saturation criteria, noted below. If the area is not a pothole, playa, or pocosin, it is inundated for at least 15 consecutive days during the growing season or 10 percent of the growing season, whichever is less, in most years. If the area is a pothole, playa, or pocosin: it is inundated for at least 7 consecutive days or saturated for at least 14 consecutive days during the growing season in most years.	Area may be farmed and maintained as existed before December 23, 1985, as long as area is not abandoned (cessation for five consecutive years of management or maintenance operations related to the use of a farmed wetland).	May be maintained to the extent that existed before December 23, 1985.
MIW (Mitigation Exemption)	A converted wetland, farmed wetland or farmed wetland pasture of which the acreage, functions and values lost have been compensated for through an NRCS-approved mitigation plan.	As stipulated in the mitigation plan/agreement.	As stipulated in the mitigation plan/agreement.
MW (Minimal Effect Exemption)	A converted wetland that is exempt from the wetland conservation provisions of the Food Security Act of 1985, as amended, based on an NRCS determination that the conversion has or will have a minimal effect on the wetlands in the area.	As stipulated in the minimal effect agreement, if applicable.	Only those activities stipulated in the minimal effect agreement, if applicable.
MWM (Mitigation Site)	The site of wetland restoration, enhancement, or creation serving as mitigation for a converted wetland receiving a mitigation exemption.	As stipulated in the mitigation plan/agreement.	As stipulated in the mitigation plan/agreement.
NW (Nonwetland)	An area that does not contain a wetland.	No restrictions.	No restrictions unless manipulation would convert adjacent wetlands.
PC (Prior Converted Cropland)	A wetland converted to cropland before December 23, 1985, and as of December 23, 1985, was capable of being cropped and did not meet farmed wetland inundation or saturation criteria.	No restrictions.	No restrictions unless manipulation would convert adjacent wetlands.
TP (Third Party Exemption)	A wetland converted after December 23, 1985, by a third party who is not associated with the participant, and the conversion is not a result of a scheme or device.	May be used for production of agricultural commodities or forage.	Further drainage improvement will cause ineligibility.
W (Wetland)	An area that meets the criteria for hydric soils, hydrophytic vegetation, and wetland hydrology. Site typically has not been manipulated by altering hydrology and/or removing woody vegetation, including stumps. These areas include FW and FWP that have been abandoned.	May be farmed under natural conditions without drainage or removal of woody vegetation.	Not applicable, as typically wetlands (W) are not manipulated. See NRCS for information if a W is used as a drainage outlet for another wetland.
WX (Wetlands that have been manipulated)	A wetland manipulated after December 23, 1985, but the manipulation was not for the purpose of making production possible and agricultural commodity crop production was not made possible.	Would cause ineligibility if production was later made possible.	No restrictions as long as production not made possible including on an adjacent wetland.

CERTIFIED WETLAND DETERMINATION

Non-Discrimination Statement

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

USDA

United States Department of Agriculture

Friday, February 12, 2021

[redacted]

RE: Certified Wetland Determination

Dear Participant,

You requested the Natural Resources Conservation Service (NRCS) complete a Certified Wetland Determination for your farm. This letter notifies you of the certified wetland determination and describes federal wetlands conservation compliance requirements.

CERTIFIED WETLAND DETERMINATION FINDINGS

NRCS conducted the wetland determination investigation for **Tract# 1280 in Mason County, IL.** Based on the investigation, the fields shown on the attached "NRCS-CPA-026-WC Certified Wetland Determination" are considered Prior-Converted Cropland (PC), Non-Wetland (NW), Artificial Wetland (AW), and/or Minimal Effect Exemption Wetland (MW) with the labels as indicated. As such, the areas indicated on the attached form and map are exempt from wetland compliance provisions of the Food Security Act of 1985, as amended, and provisions in USDA regulations found in the Code of Federal Register (7 CFR Part 12).

CONSERVATION COMPLIANCE

USDA 7 CFR Part 12 §12.33 specify how wetlands and converted wetlands can be used in order to protect wetlands for the multiple benefits they provide. Prior Converted Cropland (PC), Non-Wetlands (NW), Artificial Wetlands (AW), and Minimal Effect Exemption Wetland (MW) have no restrictions for modifying or reducing the wetness characteristics according to the Food Security Act of 1985, as amended, or 2014 Farm Bill, so long as no adjacent wetlands (i.e., those labeled FW, FWP or W) are impacted by these activities.

WHAT HAPPENS NEXT

This certified wetland determination is not adverse, by definition, in 7 CFR 614.2 and is not appealable because producer eligibility for program benefits is not in question. Likewise, this determination does not constitute an adverse decision under the National Appeals Division rules of procedure 7 CFR 11.3a.

This certified wetland determination has been conducted for the purpose of implementing the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. **This determination may not be valid for identifying the extent of Clean Water Act jurisdiction for this site.** If you intend to conduct any activity that constitutes a discharge of dredged or fill

material into wetlands or other waters, you should contact the local district office of the U.S. Army Corps of Engineers prior to starting work.

If you have questions about this determination or would like to discuss your options in greater detail, please feel free to contact Kim Smail, DC, (217) 452-3535 ext. 3 or by e-mail at Kim.Smail@usda.gov.

Sincerely,

MARK JACOB Digitally signed by MARK JACOB Date: 2021.02.16 12:54:37 -06'00'

Designated Conservationist

Attachments:
NRCS-CPA-026-WC Certified Wetland Determination Form
Determination Map

CC:
District Conservationist, Cass, Fulton & Mason Counties, USDA, NRCS, Lewistown, IL 61542
County Executive Director, Mason County, USDA, FSA, Havana, IL 62644
Bonita Friend
Ronald L Friend Trust B

USDA United States Department of Agriculture

Certified Wetland Determination

Agency: Natural Resources Conservation Service
Location: 3_T20N_R08W_SEC03

Farm: 4643
Tract: 1280
Geographic County: Mason, IL
FSA Admin County: Mason, IL

Base Map Image: NAIP 2017
Map Prepared By: Mark Jacob
Map Production Date: 2/12/2021

Certified Wetland Determination Boundary

Wetland

This map is the official Determination Map for the current request. It is the responsibility of all program participants to not convert obvious wetlands regardless of map interpretation. Only newly completed request areas are shown on this map with a Food Security Act label.

Note: Acres shown on this map may not match official FSA CLU acres due to differences in rounding or the scale at which the work was completed. Previously certified areas retain their labels and status but are not shown on this map.

N

660 0 660 1,320 Feet

1:8,469

Type notes here	Printed 01/25/2021	The purpose of this map is to display the geographic location of a variety of data sources frequently updated from local government and other agencies. Neither WTH Technology nor the agencies providing this data make any warranty concerning its accuracy or merchantability. And no part of it should be used as a legal description or document.

1703200001

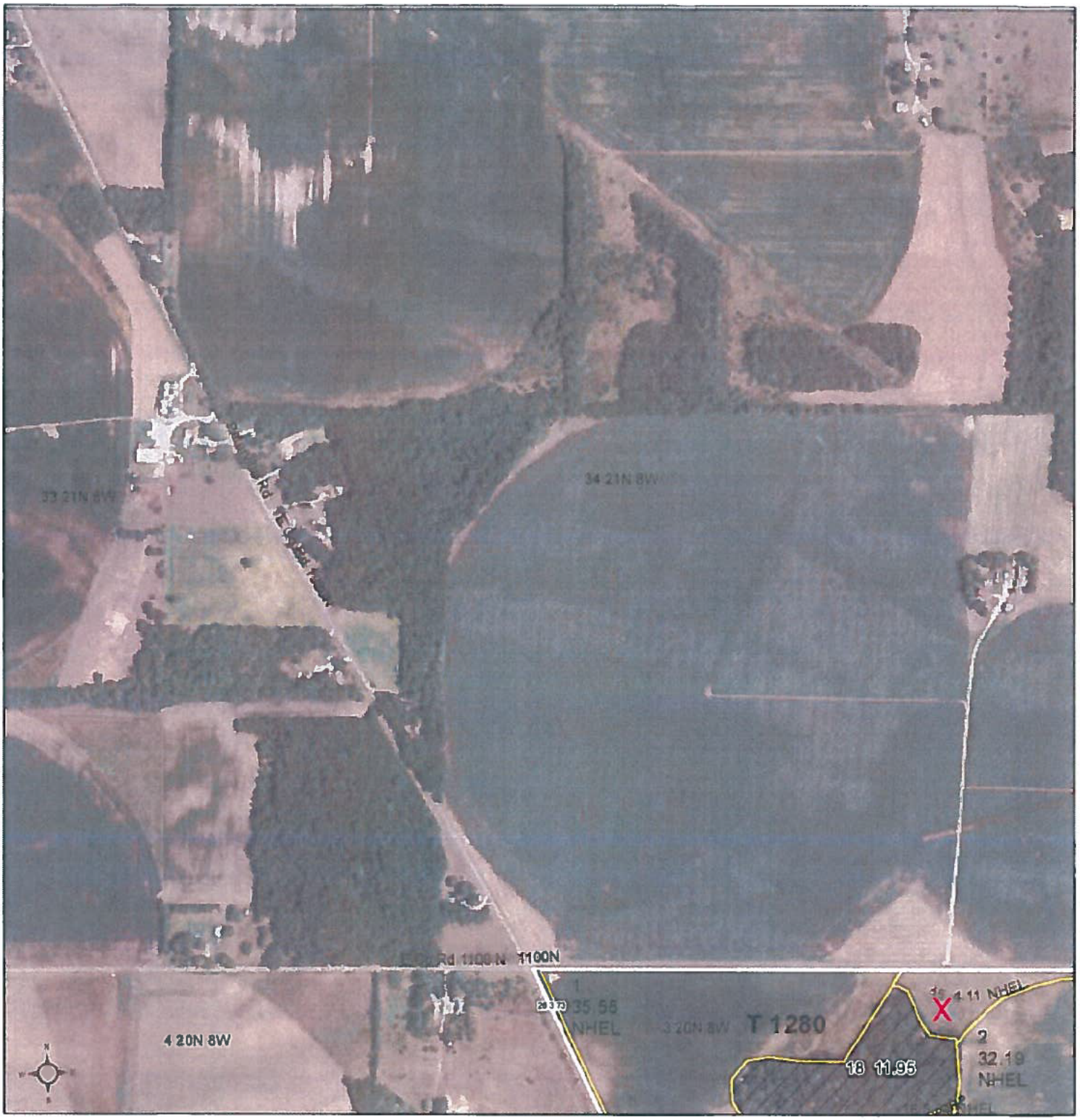
General

Owner and General Parcel Information

Property Card	Show Property Card
Alternate Parcel Number	06-11-400-0
Parcel Number	1703200001
Owner1 Name	FRIEND RONALD L TRUST B
Owner1 Address	%BONITA FRIEND TRUSTEE 11582 PETERVILLE RD HAVANA IL 62644
Owner2 Name	
Owner2 Address	
Site Address	
MailTo Address	%BONITA FRIEND TRUSTEE 11582 PETERVILLE RD HAVANA IL 62644
Legal Description	FRL W1/2 NE1/4 3 20 8 126
Gross Acreage	37.190
Homesite Acreage	.000

USDA United States Department of Agriculture

Mason County, Illinois



Common Land Unit
- Non-Cropland
- Cropland

Tract Boundary
plss_a_il_WMAS

0 285 570 1,140 Feet

2021 Program Year
Map Created November 19, 2020

Farm 4643
Tract 1280

Wetland Determination Identifiers
- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

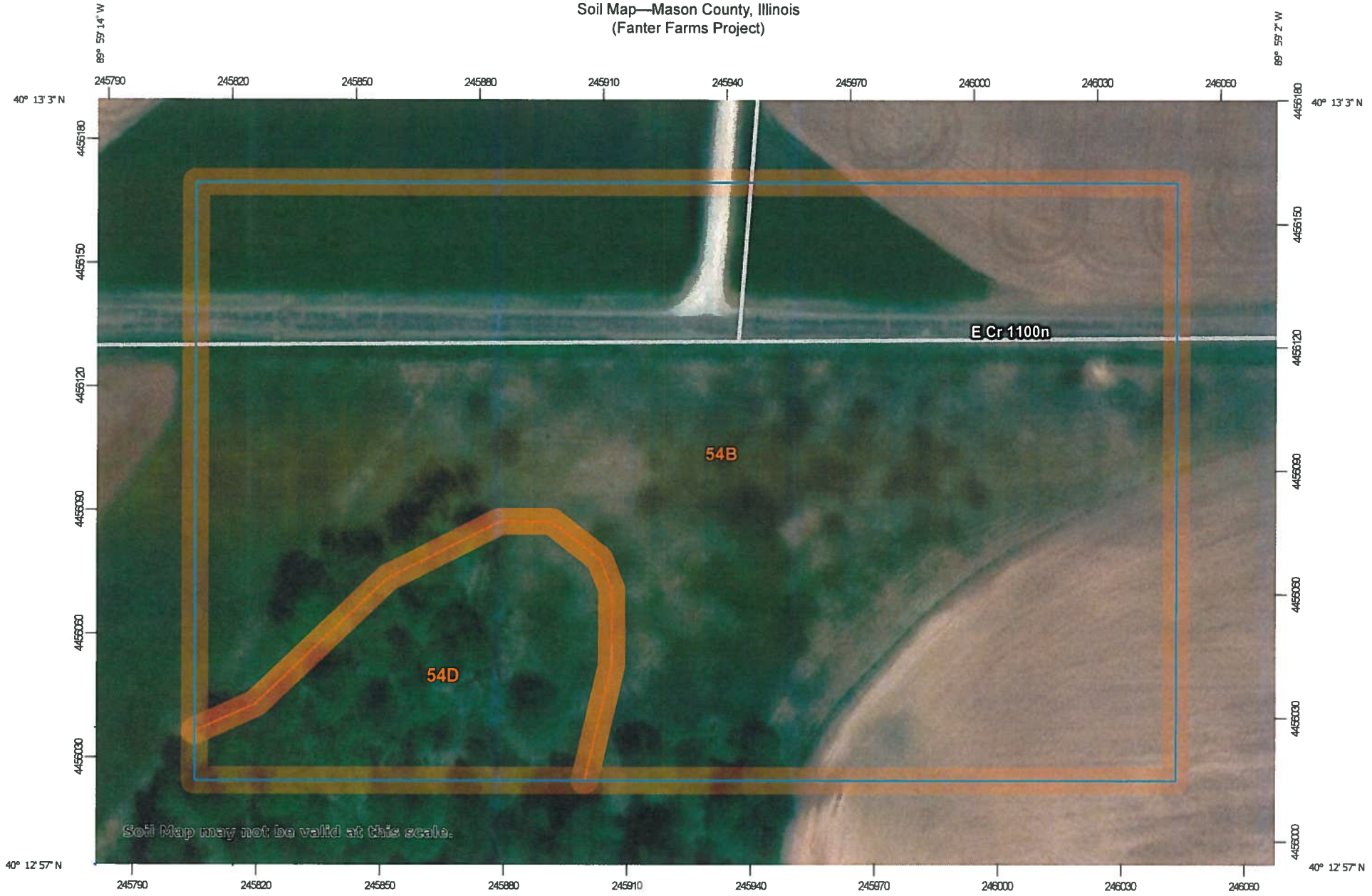
Tract Cropland Total: 580.73 acres

IL125_T1280_A1

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect ac ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' a assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside ' Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exac boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Appendix N

Soil Map—Mason County, Illinois
(Fanter Farms Project)



Map Scale: 1:1,310 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mason County, Illinois
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2012—Nov 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Appendix O

EJSCREEN Report (Version 2020)

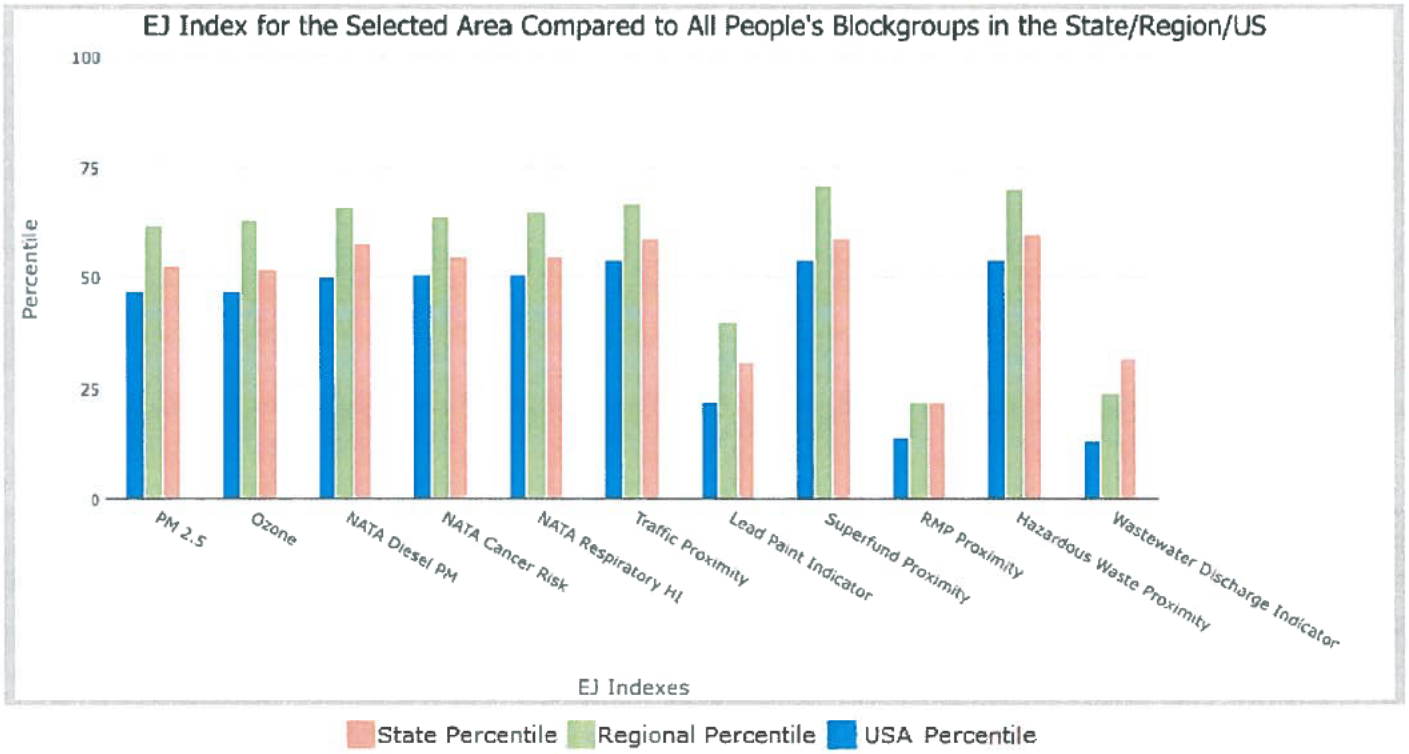
1 mile Ring Centered at 40.216238,-89.932614, ILLINOIS, EPA Region 5

Approximate Population: 8

Input Area (sq. miles): 3.14

FF Swine Project

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	53	62	47
EJ Index for Ozone	52	63	47
EJ Index for NATA* Diesel PM	58	66	50
EJ Index for NATA* Air Toxics Cancer Risk	55	64	51
EJ Index for NATA* Respiratory Hazard Index	55	65	51
EJ Index for Traffic Proximity and Volume	59	67	54
EJ Index for Lead Paint Indicator	31	40	22
EJ Index for Superfund Proximity	59	71	54
EJ Index for RMP Proximity	22	22	14
EJ Index for Hazardous Waste Proximity	60	70	54
EJ Index for Wastewater Discharge Indicator	32	24	13



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

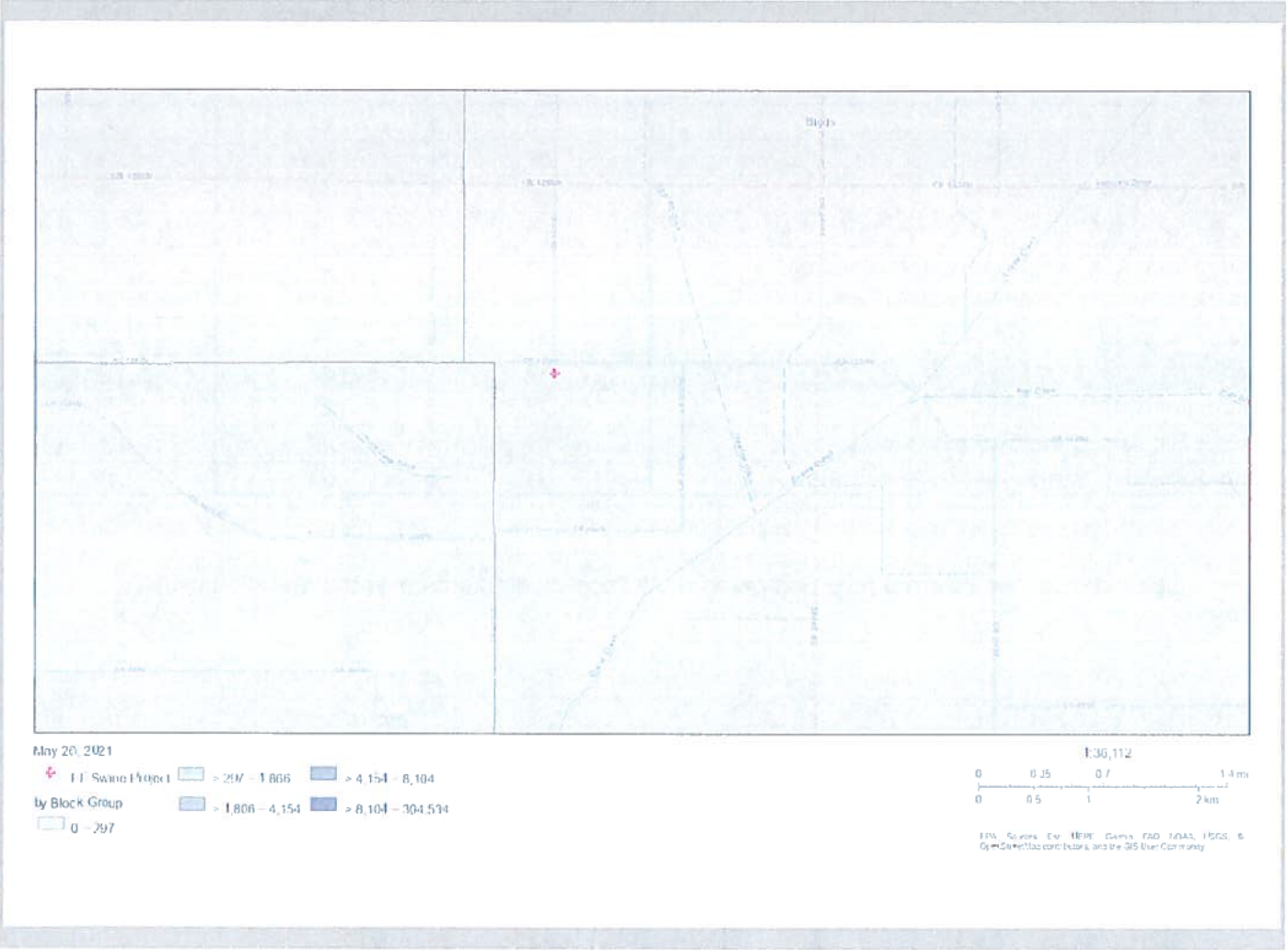
EJSCREEN Report (Version 2020)

1 mile Ring Centered at 40.216238,-89.932614, ILLINOIS, EPA Region 5

Approximate Population: 8

Input Area (sq. miles): 3.14

FF Swine Project



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2020)

1 mile Ring Centered at 40.216238,-89.932614, ILLINOIS, EPA Region 5

Approximate Population: 8

Input Area (sq. miles): 3.14

FF Swine Project

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	8.92	9.13	26	8.4	59	8.55	62
Ozone (ppb)	46.7	46.5	53	43.8	85	42.9	80
NATA* Diesel PM (µg/m³)	0.182	0.67	1	0.446	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	22	33	5	26	<50th	32	<50th
NATA* Respiratory Hazard Index	0.27	0.42	4	0.34	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	0.3	630	3	530	6	750	5
Lead Paint Indicator (% Pre-1960 Housing)	0.56	0.41	64	0.38	72	0.28	80
Superfund Proximity (site count/km distance)	0.012	0.096	0	0.13	1	0.13	6
RMP Proximity (facility count/km distance)	1.7	1.2	79	0.83	85	0.74	88
Hazardous Waste Proximity (facility count/km distance)	0.067	4.1	4	2.4	7	5	8
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.011	6.4	51	2.4	71	9.4	80
Demographic Indicators							
Demographic Index	16%	34%	27	28%	36	36%	22
People of Color Population	1%	38%	2	25%	4	39%	2
Low Income Population	32%	29%	61	30%	59	33%	55
Linguistically Isolated Population	0%	5%	44	2%	59	4%	45
Population With Less Than High School Education	11%	11%	61	10%	66	13%	56
Population Under 5 years of age	4%	6%	30	6%	30	6%	30
Population over 64 years of age	32%	15%	95	16%	95	15%	95

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

Appendix P – Comment Summary Report

COMMENT SUMMARY REPORT

Environmental Assessment for

Proposed Swine Barn Construction
located in:
Mason County, IL
CR 1100 N. Havana, IL 62644
Mason County - Parcel: 17-03-200-001

September 15, 2021

Contents

1. Introduction

This report provides a summary of comments received following the publication of the Draft Environmental Assessment (EA) prepared by the Farm Service Agency (FSA) to determine the potential effects of and identify any additional reasonable alternatives to the operation of the proposed Swine barn located in Mason County, 11270 Peterville Road, Havana, IL 62644. The EA was prepared by FSA in accordance with the National Environmental Policy Act (NEPA) (Public Law 91-190), implementing regulations adopted by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508), and Agency rules and regulations. This comment summary report provides an overview of the project public involvement process and a summary of issues raised in comments and responses to those issues. It is appended to the Final EA as recommended in 40 CFR 1503.4.

2. Public Involvement

The Draft EA was available for public review and comment for 30 days, from June 9, 2021 through July 9th, 2021. Table 1 provides the dates the NOA was published. A copy of the Certificate of Publication is provided in Attachment A. Copies of Draft EA were made available at the Farm Service Agency, 3500 Wabash Avenue Springfield, IL 62711-8287.

Table 1 Publication of Notice of Draft EA availability for review and comment

Newspaper	Dates of Publication
Havana Democrat	June 9, and June 16th, 2021

Written comments on the Draft EA were accepted by email and mail during the 30-day public comment period. All comments received or postmarked on or before July 30th, 2020 were reviewed and considered in the preparation of the Final EA.

3. Summary of Comments

33 comments were received during the public comment period, including individually prepared statements, copies of public meeting documents, letters sent to state officials, and photos of the area of the project. All comments fell into several categories, which are described in the following sections along with responses and a description on any changes that were made to the EA.

4. Wildlife and Habitat

Comment: There is a multi-state effort to identify and protect the habitat of the Illinois Chorus Frog. In Illinois the Mason County habitat has been identified in the general vicinity of the proposed Fanter Farms hog facility. Several commenters reference the need to consider this Illinois State listed (Threatened) species.

Response: It is the Agencies' responsibility under the Endangered Species Act, is to make a determination of effect on Federally listed Threatened, Endangered, and Candidate species and to coordinate that determination if required with U.S. Fish and Wildlife Service to gain concurrence. At this point the U.S. Fish and Wildlife Service list the Illinois chorus frog (Pseudacris illinoensis) as under review. Under Review Species that have been petitioned for listing and for which a 90-day finding has not been published or for which a 90-day substantial has been published but a 12 Month finding has not yet been published in the Federal Register. It also includes species that are being reviewed through the candidate process, but the Candidate Notice of Review has not yet been signed. This species has no special Federal protection status and there is no critical habitat identified for this species.

The Illinois chorus frog (Pseudacris illinoensis) as is protected as a state listed species under the Illinois Endangered Species Protection Act. This law under section (520 ILCS 10/11) (from Ch. 8, par. 341) paragraph (b) requires state agencies to coordinate with the Department of Natural Resources in determining, whether actions authorized, funded, or carried out by them are likely to jeopardize the continued existence of Illinois listed endangered and threatened species or are likely to result in the destruction or adverse modification of the designated essential habitat of such species. Where a State agency does consult in furtherance of this public policy, such State agency shall be deemed to have complied with its obligations under the "Illinois Endangered Species Act. In this case the Illinois Department Agriculture was required to consult with the Illinois Department of Natural Resources prior to approval of construction plans on March 19, 2021.

In addition to the Illinois Department of Agriculture approval, Agency personnel conducted a pedestrian site review on May 14, 2021. During this visit the Illinois chorus frog was not observed and the prime habitat requirements were absent including ponds. The site visit found the area covered in introduced grasses. The Illinois chorus frog is fossorial (burrowing), spending around 85% of its life burrowed underground in sparsely vegetated areas with sandy soil, near ephemeral (i.e. temporary) breeding ponds. Bare areas (blow outs) or sparsely vegetated areas, such as sand prairies and old fields, provide habitat that allow burrowing because plant roots do not fill the soil. While it is possible that the chorus frog could be found in sandy soils it is noted that they are typically in

proximity to water. There are no mapped tributaries or open water bodies within 1-mile of the project site.

Change to the EA: No change to EA. All Federally listed species were considered as required.

5. Sole Source Aquifers

Comment: The majority of comments (18) were regarding the possible contamination of the Mahomet aquifer. The concerns were primarily the treatment of waste generated from the facility and the measures implemented to keep that waste from reaching ground water/drinking water.

Response: On March 11, 2015 the Environmental Protection Agency (EPA) designated a portion of the Mahomet Aquifer system in east-central Illinois as a sole source aquifer. The designation authorizes EPA review of projects that receive Federal financial assistance to assess potential for contamination of the aquifer system that would create a significant hazard to public health. The EPA list agricultural projects that involve management of animal waste as projects that require review.

USDA entered consultation with EPA and on August 12, 2021 Consultation was completed with issuance of a letter requiring specific Best Management Practices that must be implemented in the project. EPA's concerns were similar to the public comments. The concerns identified were the possibility pathogens (e.g., coliform bacteria) and other contaminants (e.g., nitrate), which can leach down and contaminate groundwater. Additionally, EPA identified a vulnerability to the aquifer in this area due to the lack of a protective clay confining layer. Areas with sandy soils, such as the area in Mason County in which the proposed barn and land application sites are to be located, are particularly vulnerable. The EPA required that the operation must be designed, constructed, and operated so as to minimize non-point source pollution entering groundwater. To that end EPA provided a list of requirements and recommendations for the operation listed below.

- A registered professional engineer should certify the construction of the manure storage facility (concrete pit) and the mortality management and composting areas, to minimize leaching or discharge of liquids to the groundwater. Prior to this certification, the applicant must inform the engineer that the location is within an EPA-designated Sole Source Aquifer. The design certification has been provided in accordance with state requirements intended to prevent seepage or groundwater contamination (e.g., 8 IAC 900.502(c); 510 ILCS 77/13(b)(3); and 35 IAC 501.402(g)).

- We strongly recommend the owner/operator (or designee) complete periodic inspections of the concrete floor and walls of the manure management facility (with adequate safety precautions), such as each time the manure is emptied for land application. Additionally, pump-outs should be inspected periodically to ensure covers are intact, so as to prevent inflow of rainwater and ensure adequate freeboard is maintained to prevent manure overflow.

- We understand that perimeter foundation drain monitoring (e.g., for nitrate-N, phosphate-P, chloride, sulfate, ammonia-N) will be required by the State of Illinois (State) upon initiation of the project and strongly recommend that such monitoring be continued periodically as long as the facility is in operation. Ongoing perimeter foundation drain monitoring is recommended to help identify, and quickly mitigate, any animal waste impacts to groundwater as the barn and foundations age (e.g., if cracks develop in the concrete or the

water stop material). We note that the plans call for water from the perimeter foundation drain to be gravity-drained or pumped to daylight; the owner/operator or designee should periodically inspect the foundation drain receiving outlet for animal waste impacts.

- The owner/operator should notify the State regarding any indication of manure or animal waste release to groundwater (510 ILCS 77/18).

- Any pre-application staging of manure outside of the manure waste management system (concrete pit) should be limited to very short durations and only within areas that will limit seepage into groundwater (e.g., concrete pad) and that will limit stormwater run-off or run-on (e.g., berms / covers). Likewise, mortality management compost, which is planned to be on an inwardly-sloped concrete pad with a cover to prevent stormwater influx, should be properly managed so that contaminants will not leach into groundwater.

- The applicant should inform any other parties (including contractors and landowners) who accept, handle, or transport the manure from the facility that the area is underlain by sensitive groundwater (the Mahomet SSA).

- The applicant should not land apply (including by injection and incorporation methods) manure during rainfall (35 IAC 560.207) or when the ground is saturated, frozen, or snow-covered (35 IAC 560.206) at any site above the Mahomet SSA.

- The applicant should land apply manure as close to planting time as possible, i.e., in the spring or, if a cover crop will be planted, in early fall – when a crop that will use the nutrients is planted. Based on the storage capacity described in the facility's application (12 months), this should be achievable. Planting of fall/winter cover crops should be encouraged.

- When conditions allow (i.e., not saturated, frozen, or snow-covered AND when a crop will be present), land application of manure should target the root zone and enhance plant uptake and reduce losses (e.g., run-off, vapors, and leaching to groundwater).[6] The owner / operator or designee should consider using slower application speeds, split applications, and injection equipment which have been reported to reduce nutrient leaching to below the root zone.

- A comprehensive Nutrient Management Plan (NMP) should be maintained and implemented (e.g., soil characteristics[9], manure and soil nutrient testing, crop rotations, and manure application records) for each land application site above the Mahomet SSA. We understand that the State of Illinois does not require NMP for operations with less than 1000 animal units, but voluntarily complying with requirements for large operations (e.g., 8 IAC 900 Subpart H) is strongly recommended to protect the sensitive groundwater in this area. We understand the applicant, with assistance from experienced professionals, intends to develop their nutrient management plan during the first year following construction.

- Application rates should be limited based on the results of nitrogen leaching risk assessment(s), in addition to the requirements in 8 IAC 900.801 and 510 ILCS 77/20. A nitrogen leaching assessment should be completed for each land application field over the Mahomet SSA to determine the amount of nitrogen that the soil can handle at different times of the year to ensure protection of the SSA. Other sources that contribute nitrogen and

phosphorus to the soil (e.g., crop rotation, other fertilizers) should be considered, and realistic yield goals should be used.

- For any tiled fields, the applicant should apply manure only when the soil is relatively dry. Managing drainage water by raising drain outlets before manure application is also recommended to reduce transport of contaminants.

- For irrigated fields, good water management is needed to prevent excessive leaching of soluble nutrients such as nitrate, and any additional irrigation to leach salts from soils should be timed to minimize the leaching of nitrates.

- Periodic groundwater monitoring is recommended (such as at the on-site irrigation well as described below), so that the owner(s) and operator(s) can implement corrective actions if any impacts, such as increasing contaminants (e.g., nitrates, nitrites, coliform bacteria), are observed in groundwater downgradient of the sites where manure is land applied.

- When a well is no longer needed, it must be properly sealed

- The applicant should confirm all areas where manure will be produced, handled, or stored are at a lower elevation than the water well location(s), or provide for other means (e.g., raised casing, berms) to prevent contaminated run-off from contaminating the well.

- Periodic sampling of the water well is recommended to evaluate groundwater quality (e.g., nitrates, nitrites, coliform bacteria).

The EPA determined that if Best Management Practices such as the one's above are implemented that the project is not likely to contaminate the Mahomet Sole Source Aquifer. USDA discussed the Best Management Practices sited above with the applicant and he is implementing each measure in his plan, including the development of a Nutrient Management Plan that will account for all waste, mortality, application, and safety measures to be implemented to protect the Mahomet Sole Source Aquifer.

Change to the EA: At the time of the Draft EA the consultation with EPA regarding the Sole Source Aquifer was not complete. The consultation is now complete, and the above agreed mitigation will be implemented. The paragraph on Sole Source Aquifer has been updated accordingly.

6. Floodplains

Comment: Five commenters were concerned about flooding in the area of the development.

Response: The site is situated within upland elevations (518 feet above mean sea level) of the Jordan Creek watershed mapped on Panel 17125C0325D of the Flood Insurance Rate Map (FIRM). It is characterized as an area of minimal flood hazard. The closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. There

are no floodplains within or in the vicinity of the site or mapped special flood hazard areas that would be impacted by the project.

Change to EA: No change.

7. Wetlands

Comment: Three commenters discussed possible impacts to wetlands.

Response: USDA is committed to not adversely impacting wetlands by having a conservation plan in place when indicated. As part of the original compliance for the Fanter Farm an AD-1026 (Highly Erodible Land Conservation and Wetland Conservation Certification) for each field is required. The site is situated within upland elevations (518 feet above mean sea leavel) of the Jordan Creek watershed. There are no wetlands mapped on the National Wetland Inventory, floodplains, and the closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. Soils are not hydric and are classified as Plainfield sand, 1 to 7 percent slopes, which are found on summits or upland landscapes. The NRCS has delineated wetlands at the site with no findings (Appendix M). During the site visit conducted on May 14, 2021, there were no stream, or wetland features observed.

Change to EA: No change.

8. Water Quality

Comment: Commenters suggested the farm operations generate waste resulting in significant adverse effects to water quality these comments were intermingled with the sole source aquifer comments.

Response: The site plan and mitigation measures implemented for the sole source aquifer protection will serve to meet the surface water quality standards and prevent waste from reaching surface waters.

In accordance with the site plan, all waste generated will be directed to under floor pits that shall be composed entirely of wastewater. All waste will be stored in the pit until applied to fields. The capacity of the waste pit is more than one year of production. The design certification has been provided in accordance with state requirements intended to prevent seepage or groundwater contamination (e.g., 8 IAC 900.502(c); 510 ILCS 77/13(b)(3); and 35 IAC 501.402(g)). This concrete pit was designed by structural engineers who specifically designed it with reinforced concrete meeting the needs of this sensitive area where the aquifer is 60-80 feet below the surface.

Within the first six months of production, prior to any application of waste to fields, a Nutrient Management Plan (NMP) will be developed for this operation. An NMP is a detailed planning document that identifies conservation practices and management activities that, when implemented, help to ensure that both production and natural resource protection goals are achieved. The objective of an NMP is to document those practices and activities that will help achieve the goals of the producer and protect or improve water quality. This operation is a medium AFO and has ample land available to utilize all nutrient produced. Most of the terms of the NMP are already include in the plan by virtue of state law and mitigation required by EPA during the consultation process.

Nutrient Management Plans include a minimum of nine terms:

- **Adequate storage capacity** – must have, at a minimum, sufficient storage capacity to ensure that the production area is designed constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event. *This project has been designed with a covered 10-foot pit which is designed to hold over one year of production. The underfloor design eliminates the precipitation risk. At the site the aquifer is 60-80 feet below the surface. The State of Illinois requires lagoon design based on the distance from the lagoon bottom to an aquifer. This distance determines whether a liner and groundwater monitoring system are needed. Facilities at which monitoring wells are required (those with an aquifer within 20 feet of the lagoon bottom) must test water samples periodically for a variety of contaminants.*
- **Mortality management** – Managing mortalities to ensure that they are not disposed of in a liquid manure, stormwater, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities. *Mortality management will be accomplished through composting, which is planned to be on an inwardly sloped concrete pad with a cover to prevent stormwater influx, will be properly managed so that contaminants will not leach into groundwater.*
- **Divert clean water** - Ensuring that clean water is diverted, as appropriate, from the production area. *The plans call for water from the perimeter foundation drain to be gravity-drained or pumped to daylight; the owner/operator or designee will periodically inspect the foundation drain receiving outlet for animal waste impacts. Additionally, there are state requirements for monitory to ensure no waste is found in the drain water leaving the facility.*
- **Prevent direct contact with waters of the U.S.-** *This site is ideally located to avoid contact with waters of the U.S. The site is situated within upland elevations (518 feet above mean sea leavel) of the Jordan Creek watershed. There are no wetlands mapped on the National Wetland Inventory, floodplains, and the closest headwater tributary on the National Hydrography Dataset (NHD) is over one mile away from the project site. Soils are not hydric and are classified as Plainfield sand, 1 to 7 percent slopes, which are found on summits or upland landscapes.*
- **Chemical disposal**- Ensuring that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants. *The NMP will identify chemicals used or stored (or both) on-site and document appropriate disposal methods.*
- **Conservation practices** to control runoff to waters of the U.S. - Identifying appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, that control runoff of pollutants to waters of the U.S. *The NMP will be developed to NRCS standards which will specify specific setbacks for application of waste to fields to avoid sensitive areas, wells and neighbors. Additionally, the barn was designed in a manner to flow rainwater away from the production area thereby avoiding contaminating rainwater.*
- **Manure and soil testing**- Establishing protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater. *By virtue of testing both the manure and the soil during the previous 12 months the data can be used to determine rates of nitrogen and phosphorus application from manure, litter, and process wastewater that can be utilized in each field thereby avoiding runoff situations that may threaten offsite waters.*
- **Protocols for land application-** the NMP will restrict applying manure, litter, or process wastewater closer than 100 feet to any downgradient surface water. States implement other setbacks, such as from property lines, homes, surface waters, wells, road rights-of-way, and

public use areas. Those setbacks will be included in a NMP that will be developed before any waste is applied.

- **Records-** Identify specific records that will be maintained to document the implementation and management of the minimum elements described above. *The NMP will specify the records to be kept regarding the waste application.*

Change to EA: The Water Quality section has been updated to include this information.

9. Odor

Comment: Some were concerned with the odors emitted from the facility.

Response: Sometimes odors from livestock and poultry farms are an issue for nearby neighbors. Illinois Department of Environmental Management (IDEM) does not regulate odors from farms. The agency provides farmers with guidance on Best Management Practices (BMP) to reduce odors. The producer has agreed to implement all appropriate BMPs. The Nutrient Management Plan will add specific features that will address odor. However, the current plan and BMPs already incorporates several practices recommended by IDEM to reduce odors.

Best Management Practices incorporated into this plan to address odor:

- Diverting rainwater away from areas where it could become contaminated
- Maintaining proper gradient so that water does not stand in access roads and around the production facility
- Keeping watering devices in good repair
- Preventing liquids from collecting under animals and watering equipment by using slotted floors or other technologies
- Installing an underfloor ventilation system in confinement buildings where below floor manure storage is used
- Constructing lagoons, settling basins and holding ponds so that wastes do not overflow or leach into groundwater and so that odor is minimized
- Covering the lagoon, settling basin or holding pond to reduce surface odors being released
- Maintaining sufficient storage capacity to prevent overflow of lagoons, settling basins and holding ponds
- Developing a manure management plan (NMP will include)
- Applying manure on land which is not frozen or snow-covered
- Composting will be covered on concrete

Change to EA: The Air Quality Section is updated with this information

10. Air Quality

Comment: Some commented that the air quality would be compromised by the addition of this swine barn.

Response: The farm is in Mason County Illinois where they must comply with all criteria pollutants established by the EPA in compliance with the Clean Air Act. Mason County Illinois is not listed on EPA's website for Nonattainment/Maintenance for air quality.

Greenhouse Gas

The emissions of Greenhouse Gases from pig houses come from two sources: exhalation by pigs and release from manure (Philippe, 2015). Methane and nitrous oxide are the GHGs most associated with pork production. The potential emission sources are controlled by operating and maintenance requirements included in Best Management Practices (BMPs) and Nutrient Management Plans, which prevents significant air quality impacts. The estimated release of air pollutants does not cross the threshold identified in the Illinois State Implementation Plan (SIP) for the Clean Air Act.

Swine are not ruminants and have a low emissions factor. Cumulative emissions of GHGs produced by pigs and manure at pig house level are estimated at approximately 4.87 kg CO2equiv. per kg of carcass (Philippe, 2015). This plan calls for production 2.5 placements of 2400 head of pigs that will be taken from ween 5 kg (11 lbs.) to 21 kg (46 lbs.). Therefore:

- (2,400X 2.5) = 6,000 – pigs through facility
- 6,000 X 10 kg= 60,000 kg – kg gained
- 60,000 X 4.87 = 292,200 kg of CO2equiv.
- 292,200/1000 = **292.2 metric tons**

The contribution of this operations to total GHG gas is miniscule on a national, regional and local basis and impacts to this operation over time are not expected to be detectable. This operation, by virtue of its indoor, climate-controlled design along with redundant emergency procedures, including backup generators and dual sources of water, make this type of operation particularly resilient to climate change.

Ammonia

Currently, there are limited Federal regulations for ammonia emissions. The Clean Air Act (CAA) provides states with the Federal authority to regulate these emissions through their State Implementation Plans (SIPs), particularly as a precursor emission to fine particulate matter formation. Though agricultural ammonia is not directly regulated by the Federal government, it is a public concern. NMPs prescribe practices to protect air quality by reducing nitrogen emissions (ammonia and nitrogen oxide (NOx) compounds) and the formation of atmospheric particles. NMPs contemplate practices that limit the loss of ammonia and these practices will be incorporated in the plan specifically to reduce the loss of excess nitrogen.

Practices for ammonia mitigation include:

- The nitrogen availability of the planned application of manure or inorganic nitrogen fertilizer must match plant uptake characteristics as closely as possible, taking into consideration the timing of nutrient application(s) to minimize leaching and atmospheric losses,
- Dietary Modification (e.g., reduce crude protein),
- Frequent manure removal,
- Manure treatment (e.g., additives acidification, drying, and separation),
- Housing design (reduced manure surface),
- Covered manure storage,
- Sub-surface injection or rapid incorporation of manure into soil,
- Facility location to lessen impact emissions,
- Barriers/shelter belts (e.g., vegetative buffer), and
- · Exhaust air treatment (e.g., wet scrubber biofilter).

Several of the mitigations practices above are already included in the operation plan and required mitigation from EPA. When NRCS completes the NMP within 6 months of the operation, more practices will be included.

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. Exposed soils would be wet down to control fugitive dust. Similarly, during construction, minor and localized emissions associated with heavy machinery would be expected. None of this construction related impacts would have a significant or long-term adverse impact to surrounding air quality or communities.

Because of the rural nature of the project and proximity to neighbors, it is unlikely that any effects would be noticeable. The proposed action is located on a 200+ acre tract of land. Wooded areas are to the south of the farm and open fields are to the north. 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 would serve to facilitate the dispersion of odors before reaching off farm residences.

Change to EA: Implemented changes to the Air Quality Section

11.Noise

Comment: One commenter was concerned with the level of noise emitted by the operation; the specific comment was regarding the use of engine braking that may rattle the walls.

Response: The State of Illinois has specific noise regulations found in 20 ILCS 3515/2. Section 901.107 contains exemptions which include construction and some farming practices. These regulations in 625 ILCS 5/12-602.1, Sec. 12-602.1. Excessive engine braking noise signs, allows a county or municipality to post signs that prohibit the driver of a commercial vehicle, as defined in Section 1-111.8 of this Code, from operating or actuating any engine braking system that emits excessive noise.

The arrival, operation and departure of feed trucks, loading trucks, and clean out equipment contribute to noise levels outside the barn. Unattended alarms which go off due to the poor farm management can be another source of annoyance to neighbors. (Paulson, 1999)." Based upon the research reported in this article the noise at the boundary of the land should not exceed the legal limits or be annoying to the neighbors.

Effects on noise; 1) will not create noise that will interfere with communication, 2) is intense enough to damage hearing, or 3) is otherwise annoying. The increase in noise level during construction would be temporary, resulting from operation of heavy equipment during normal hours. Construction of a facility of this size would typically take six months from start to finish.

Once the facility is operational, truck traffic servicing the facility would occur infrequently during normal daylight working hours. Hog collection, new placement, and feed delivery requires occasional truck and equipment operation during the evening and early morning hours. The farm's backup generators would only be in operation during a power outage or for routine testing and due to the remote nature of the operations and the surrounding trees it is unlikely that the Illinois State Regulations regarding noise

would be exceeded. The production area is more than 1,000 feet from the closest neighboring residence. By virtue of the specific site plan that calls for the placement to be removed from residences, the Agency has determined that there will be no significant effect on noise.

Change to the EA: This information has been incorporated into the Noise Section.

12. Environmental Justice

Comment: Some commenters were concerned about the impacts to their rural community.

Response: The proposed action will not cause any adverse human health or environmental effects as defined in Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". The proposed project is in Mason County Illinois. The area has historically been utilized for swine production.

The US Environmental Protection Agency's (EPA) Environmental Justice screening tool was reviewed for this location considering the area with in one mile of the project site, Appendix S-1. The block group that the project is located within is comprised of the following populations.

Group	Block Group Percentage	State Percentage
Minority Population	9%	38%
Low Income Population	41%	29%

Based on the review, the project area does not contain a disproportion population of minority or low-income groups when compared to the state percentage.

The proposed action will occur on a site that is currently in farm production. The construction of the proposed project will not affect the nature of the site or surrounding area. The project is not expected to impact air quality, water quality, or existing noise conditions for the surrounding residences. Delivery trucks are already common in this area and the additional service trucks for this one farm will likely not be noticeable, and nearby residences will not be affected. The project will not impact minority or low-income populations, nor will it have a negative impact on the socioeconomic conditions of the area. The siting of the barns has been reviewed in accordance with local and state laws and all setbacks have been met.

Change to the EA: The Environmental Justice Section was updated with added analysis.

13. Property Value

Comment: Several commenters were concerned that property values will be negatively affected by the farm.

Response: This facility is being built in an area that is already zoned for agriculture, so property values are already assessed based on farming in the area. The current use of the subject land includes the fields used for livestock and forage production and are subject to the application of fertilizers, including manure. The existence of the farm and use of manure from the farm as fertilizer has not changed the rural character of the region nor patterns of land use and management. Studies show that the age and manure handling systems of larger operations mitigate negative effects (Tonsor, 2007). Due to the modern design of the operation and the location of the lagoons under the barns, and the associated

decrease to the potential for environmental impacts, this facility is not expected to adversely impact property values in the area.

Change to EA: No change to the EA

14. Traffic Conditions

Comment: One commenter was concerned with the increased traffic on the roads.

Response: The agency reached out to the Road Superintendent who stated all roads were rated for 80,000 lbs. The Integrator has completed a survey prior to selection of this site to ensure area is accessible to their deliveries. This is an agricultural area already experiences deliveries of feed and animals to other farms including hog facilities in the area. It is expected that deliveries of feed will occur 2-3 times a week and the placements will be changed 2 ½ times a year. This slight increase in traffic will not create a significant impact in the area.

Change to EA: No change to the EA

15. Health Risk

Comment: Some comments suggested that the farm will have impacts to public health, resulting from air and water pollution from exposure to hogs on the farm site. Articles on the effects of CAFOs on public health were provided.

Response: By virtue of the mitigation implemented through the EPA consultation for the Sole Source Aquifer and the BMPs. As noted above, concern over air quality impacts from operation of the farm is unfounded based on standards set by State and Federal regulations. Mitigation measures were designed to eliminate or minimize the potential air, or surface and ground water impacts resulting from the farm's operations. The air emissions at the facility do not warrant an air permit. FSA must rely on the permitting authority and expertise of the State and Federal agencies charged with protection of air and water quality under CAA, CWA, and related State regulations. Given that there is no evidence of water or air impacts associated with operation of the facility, FSA has determined that compliance with Federal and State regulations protecting these resources supports the determination that the farm will not cause significant impacts to public health.

There were links to articles submitted:

- A May 2021 Study titled **Air quality–related health damages of food** (Nina G. G. Domingo, 2021) This is a broad study that links death to agricultural practices in general,
- A 2005 study titled **Symptomatic Effects of Exposure to Diluted Air Sampled from a Swine Confinement Atmosphere on Healthy Human Subjects** (Susan S. Schiffman, 2005)was cited, had findings that clinically important symptoms in health human volunteers were found when exposed to swine air conditions. This study was based on large CAFOs with twice to three times the animals proposed on Fanter Farms. The results of this study indicate that a 1-hr exposure to odorous swine air in an environmental chamber (at levels that could occur downwind from a swine facility both within and beyond the property line) has no significant acute effects on vital signs, lung function, nasal inflammation, salivary IgA, mood, attention, or memory in healthy volunteers. That is, there were no statistical differences on **objective measures** of physical symptoms, mood, or attention that resulted from a 1-hr exposure to air emissions from a swine facility when compared with clean air in persons who self-selected to participate in the exposure study.

- A 2009 study **Malodor as a trigger of stress and negative mood in neighbors of industrial hog operations** (Rachel Avery Horton, 2009)looked at a small group (101) of participants over 2 weeks and found that hog odor was associated with stress and mood. The study area was in North Carolina is very different from the open space and sparce population of found in vicinity of the proposed project. North Carolina had very minimal regulations regarding confined animal production. Illinois has much regulatory guidance regarding citing and this facility in and of itself has built in mitigation that will limit any affects to the local area. The full text of this study was not submitted and was not found.
- A 2006 article titled **Emissions of ammonia, hydrogen sulfide, and odor before, during, and after slurry removal from a deep-pit swine finisher** was cited. The findings of this article found that maintaining an adequate barn ventilation rate regardless of animal comfort demand is essential to keeping gas levels inside the barn below hazardous levels.
- A 2016 article titled **Concentrations of Bioaerosols, Odors and Hydrogen Sulfide Inside and Downwind from Two Types of Swine Livestock Operations** (Peter S. Thorne, 2009)this article compared slat barn drains to hoop houses with compost bedding. Hoops were found to produce substantial toxicant air emissions and cannot be considered less polluting than 1200 pig conventional confinement operations. This study also identified toxicant concentrations that exceed recommended exposure limits for human health including endotoxin, odor, and bioaerosols.
- A 2012 article titled **Volatile organic compounds at swine facilities: a critical review** (Ji-Qin Ni, 2012) found that similar to the other pollutants, spatial and temporal variations of aerial VOC concentrations and emissions existed and were significantly affected by manure management systems, barn structural designs, and ventilation rates. Compared with other aerial pollutants in animal agriculture, the current scientific knowledge about VOCs at swine facilities is still very limited and far from sufficient to develop reliable emission factors.

Articles submitted regarding community health concerns of hog CAFOs were provided. These are not specifically relevant to this situation for several reasons. Mason County lacks the dense concentration of hog farms present in the North Carolina and other studies. The facilities in those areas are older than the proposed Mason County farm and were constructed under different or no permit requirements. Given the unique circumstances found in Mason County, it is unwarranted to anticipate the same scale of air quality impacts observed in the research provided.

Change to the EA: No change.

Bibliography

Ji-Qin Ni, W. P. (2012). Volatile organic compounds at swine facilities: a critical review. *Chemosphere*, 769-88.

Julia Kravchenko, S. H. (2018 Vol 79). Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations. *North Caroplina Medical Journal*, 278-288.

Nina G. G. Domingo, S. B. (2021). Air quality–related health damages of food. *Proceedings of the National academy of Sciences of the United States of America* (p. 118 (20)). Minnesota, St. Paul: Department of Bioproducts and Biosystems Engineering, University of Minnesota, St. Paul.

Peter S. Thorne, P. A. (2009). Concentrations of Bioaerosols, Odors and Hydrogen Sulfide Inside and Downwind from Two Types of Swine Livestock Operations. *J Occup Environ Hyg.*, 211–220.

Philippe, B. N. (2015). Review on greenhouse gas emissions from pig houses: Production of. *Agriculture, Ecosystems and Environment*, 10-15.

Rachel Avery Horton, S. W. (2009). Malodor as a trigger of stress and negative mood in neighbors of industrial hog operations. *Am J Public Health*.

Susan S. Schiffman, 1. C. (2005). *Symptomatic Effects of Exposure to Diluted Air Sampled from a Swine.* Durham, North Carolina, USA: 1Department of Psychiatry and 2Department of Medicine, Duke University Medical Center, .

Tonsor, G. (2007, September 14). *Economic Impacts of Hog Operations.* Retrieved from The Pig Site: https://www.thepigsite.com/articles/economic-impacts-of-hog-operations

Appendix A Newspaper Certificate of Publication

Appendix A Newspaper Certificate of Publication

In The Matter Of

USDA - Farm Service Agency

Proposed Swine Feeding Facility

Attorney

Published 2 times

Date 6/9/2021

Number 23 Volume 172

Date 6/16/2021

Number 23 Volume 172

Fee $ 70.52

Invoice # 19465

The Mason County DEMOCRAT

Official Certificate of Publication as Required by State Law and IPA By-Laws

Certificate of the Publisher

Martin Publishing Co., Inc. certifies that it is the publisher of the Mason County Democrat. Mason County Democrat is a secular newspaper, has been continuously published or weekly for more than fifty (50) weeks prior to the first publication of the attached notice, is published in the City of Havana, County of Mason, Township of Havana, State of Illinois, is of general circulation throughout that county and surrounding area, and is a newspaper as defined by 715 ILCS 5/5.

A notice, a true copy of which is attached, was published 2 times in Mason County Democrat, namely one time per week for 2 successive weeks. The first publication of the notice was made in the newspaper, dated and published on 6/9/2021, and the last publication of the notice was made in the newspaper dated and published on 6/16/2021. The notice was also placed on a statewide public notice website as required by 715 ILCS 5/2.1.

In witness, Martin Publishing Co., Inc. has signed this certificate by R.L. Martin, JR, its publisher, at Havana, Illinois, on 6/16/2021.

Martin Publishing Co., Inc.

By:

Heather Worner

Publisher/Authorized Agent

(Note: Unless otherwise ordered, notarization of this document is not required.)

date, the court may enter a judgment granting petitioner a tax deed.

This matter is set for hearing in the Circuit Court of this county in Havana, Illinois on October 13, 2021 at 11 AM before Judge Tucker, or whomever may be sitting in his or her stead.

JICTB, Inc., Petitioner
Angela L. Tucker, Esq.
JICTB, Inc.
1701 Broadmoor Dr. Ste 100
Champaign, IL 61821
6/2,9,16np

USDA-Farm Service Agency
Notice of Availability
Proposed Swine Feeding
Facility Draft Environmental
Assessment

U. S. Department of Agriculture, Farm Service Agency (FSA) announces they will be completing an Environmental Assessment (EA) for a proposed swine finishing facility. The primary objective of the project is to construct a 101' x 193' swine building with 10'deep pit for manure storage. The project is to be constructed in the NW¼ of the NE¼ of Section 3, Township 20-North, Range 8-West, 3rd PM, Mason County, IL.

FSA is accepting comments on the potential effects of the proposed project on protected resources and the human environment through July 1, 2021. Information regarding this project can be viewed by contacting John Gehrke, Farm Loan Chief/ State Environmental Coordinator at john.gehrke@usda.gov or at (217) 331-6873 .

6/9,16pd

Appropriation Ordinance will be taken by the Board of Trustees at the Havana Rural Fire Station, at the address above, on July 12, 2021 at 7:00 P.M.

DATED THIS 10th day of May, 2021

BOARD OF TRUSTEES OF THE
HAVANA RURAL FIRE PROTECTION DISTRICT
MASON COUNTY, ILLINOIS

By: Larry Haubensak
President
6/9np

CASE NO. 2018TX31 (P-26)
FILED April 14, 2021
TAKE NOTICE

TO: JEFFREY BENNETT, MASON COUNTY CLERK; OCCUPANTS, PARTIES IN OCCUPANCY OR ACTUAL POSSESSION OF SAID PROPERTY; AND UNKNOWN OWNERS or PARTIES INTERESTED IN SAID LAND OR LOTS AND UNKNOWN OCCUPANTS

This is NOTICE of the filing of the petition for Tax Deed on the following described property: Property located at:

1135 SOUTH PEAR STREET
HAVANA, ILLINOIS
Property Index Number:
09-12-201-014

On November 3, 2021 at 1:15 PM, in the Circuit Court of Mason County, Mason County Courthouse, 125 N Plum St, Courtroom 1, Havana, Illinois, the Petitioner intends to make an application for an order on the petition that a Tax Deed be issued. The real estate was sold on October 18, 2018, for delinquent real estate taxes and/or special assessments for the year 2017. Certificate No. 2017-0152. The period of redemption will expire on October 13, 2021.

DG ENTERPRISES, LLC-X, LLC PETITIONER
9564-914855
5/26,6/2,9np

This is an official protest to the proposed Fanter swine feeding facility in Mason County, Section 3 of township 20 range 8.

1. Primary concern is contamination of the Mahomet aquifer. The sole source aquifer designation was granted by the U.S. Environmental Protection Agency (EPA) because contamination of the Mahomet Aquifer system would create a significant hazard to public health since there are no other feasible alternative sources of drinking water for the people that currently rely on the aquifer. This includes not only the many residences located in close proximity to the proposed site but over 500,000 who rely on the aquifer as a sole water source.

2. The location of the proposed CAFO sits on top of the Mahomet aquifer. With a 10 foot deep proposed hog urine/feces concrete waste pit, the proximity to the aquifer is a major concern. Concrete pits disintegrate over time with constant freeze thaw. Due to Illinois law these facilities can increase once established with no issue every 2 years.

The waste from the pits are then sprayed on surrounding fields and further contaminating the air and ground water. Heavy antibiotics are used to control the disease incurred from close hog confinement and will also be leached into the ground water and wells making drinking water unsafe. Water is a precious commodity and should be protected.

3. Our home and property is located 1/4 mile and is one of the closest residences from the proposed Fanter CAFO. For the past 20 years we have worked very hard to create an environment on 20 acres that is home to Monarch butterflies, varieties of wild birds including quail, turkey and pheasant. We also have honeybee hives. The environmental impact of contaminated water will likely be devastating to the many species that are becoming endangered that we see thriving here now.

4. Air quality is also a concern. Large fans run constantly to cool and clean the air inside the containment area. Airborne bacteria is common with CAFO facilities. Hog carasses waiting for removal create another health issue with swarms of flies that carry bacteria for miles. The residents impacted by this CAFO include elderly with breathing issues, disabled veterans who have served our country and survived deployments but now have to be concerned about health issues with water and air quality after having moved to this area for clean air and water which is a constitutional right for every citizen and should be a concern for everyone.

5. Yes, farmers legally have a right to do what they want with their land. As stewards of the land they should also have an obligation to not compromise the environment and quality of life of their neighbors and future generations.

Residents also should have rights to protect their lifetime investments, health and concern for our environment and future generations.

Respectfully submitted,

[redacted] (property owner)

[redacted]

Mason County, Havana, Illinois

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Thursday, June 17, 2021 8:51 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Fanter Hog Confinement facility in Mason County

[External Email]
If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Dear Mr. Gehrke,
We are very much concerned about the hog confinement facility of the Fanter farm a few miles from our home. We are concerned about the Mahomet Aquifer which we are so fortunate to have here in Mason County. It is so close to our surface here and we would not want anything polluting it. With more and more of these facilities cropping up in our county it could very well happen. And a half mile is not very far from a neighbor's house. I have not heard a single elected person say put one here by my house.

I sincerely hope you consider protecting our water here as well as the quality of life here.

Thank you !!

[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 23, 2021 6:21 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Fanter CAFO at Peterville

As a concerned citizen, I am writing to you about the proposed Fanter CAFO. I can tell you as a farmer's wife that CAFOs are not a safe farming practice. I am terribly upset that one could be placed so close to a town and over an aquifer.

This sounds to me like profit is coming before people. In my research of CAFOs and risks to neighborhoods and residents forced to live by them, I fear for children, people with preexisting health conditions, ground water, dust-containing manure,property value and frankly, quality of life for nearby residents. Being near a CAFO is not a good place to live by any means.

I would encourage your department to take a stand on any CAFO that is sited near residents and especially a town. Stricter laws of such confinements are necessary before any CAFO is approved.

Thank you,
[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Thursday, July 1, 2021 1:56 PM
To: Gehrke, John - FSA, Springfield, IL; gkcurtis@casscomm.com; mcharryh@netzero.net
Subject: [External Email]Correct Version from ICCAW and MCCC / EA comments Fanter Farms
Attachments: Written Public Comments Regarding Fanter Farms submitted to Illinois FSA July 1 2021.pdf

Dear John,

Please accept this updated version of EA comments on behalf of the Mason County Concerned Citizens & Illinois Coalition for Clean Air & Water.

Thank you,

[redacted]n County
Peoria County
Mason County

Farm Services Agency Environmental Assessment of Fanter Farms
Public Comments Submitted to: **John W. Gehrke,** Farm Loan Chief, Illinois FSA
Public Comment Deadline: Thursday July 1, 2021

The following written public comments were prepared for the community that lives and works around the proposed location of the Fanter Farms hog facility in Mason County, Illinois.

1. Proximity to Peterville. The Fanter Farms hog facility is proposed to be located within a half-mile of the town of Peterville (platted in 1868) as can be seen in this Acre Value snapshot:[1]

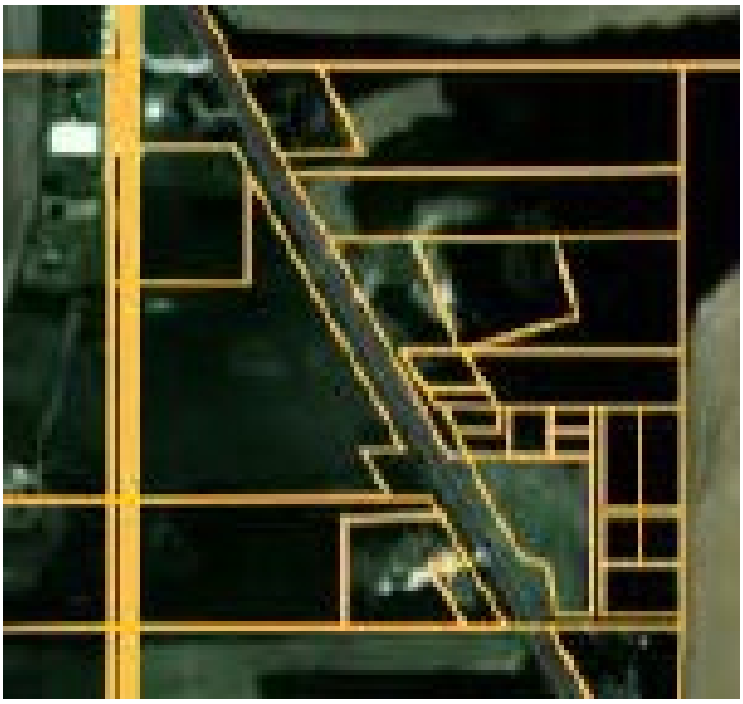


Figure 1 – Closeup of the parcel divisions of the town of Peterville, Illinois.

The families that live in this town and within a short distance of the proposed site of Fanter Farms hog facility filled out a questionnaire that asked their name, number of people in their family, presence of children and indications of people at risk due to health conditions. The results of that survey will be submitted as a separate comment but are summarized here:

> 15 residences in contiguous Peterville, 41 residents, 3 elderly adults on oxygen, 3 other adults with respiratory problems, 8 children that are 8 years old or younger; 1 child on the way (pregnancy).

[1] See: https://www.acrevalue.com/

Figure 2 – Larger view of Petersburg and the proposed location of Fanter Farms.

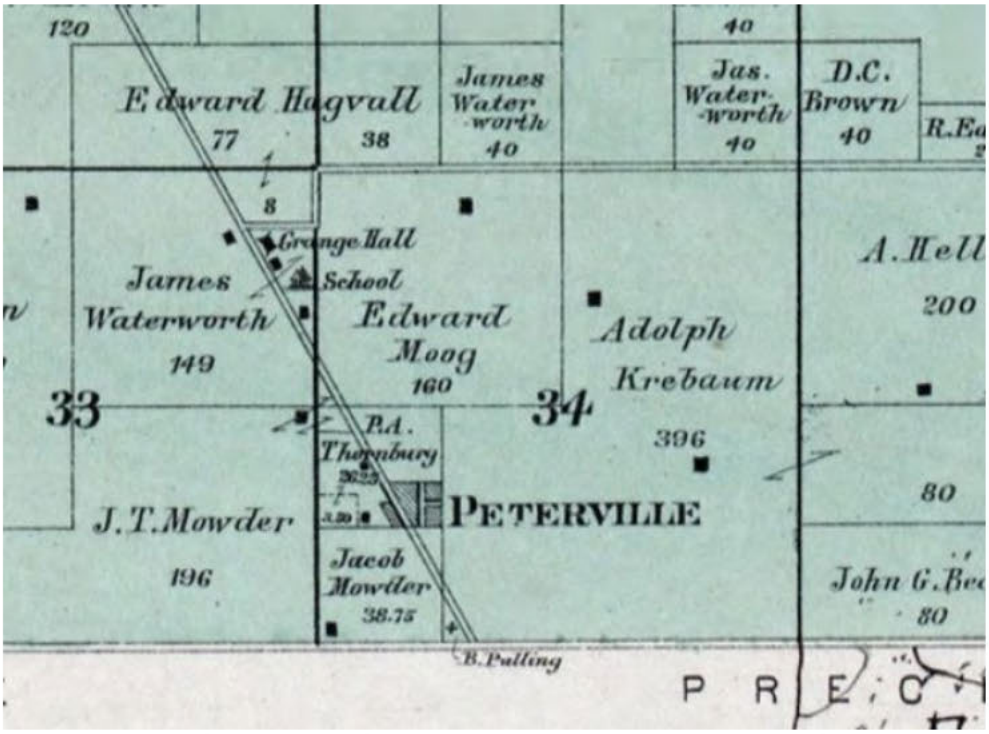


Figure 3 – Peterville located in Section 34 – Mason County map (1891)[2]

[2] See: http://www.historicmapworks.com/Map/US/1599111/Havana+Township++Peterville++Bath++Poplar+City++Illinois+River/Mason+County+1891/Illinois/

On page 18 of the draft EA, this statement is made regarding setbacks to residences:

> "The setback requirements of the Livestock Management Facilities Act, administered by the Illinois Department of Agriculture, are legal requirements put in place to protect those inhabitants, commercial businesses, and places of congregation within a certain distance of livestock facilities."

The FSA needs to understand that the Illinois Department of Agriculture has not enforced the statutory setbacks when dealing with the proposed Fanter Farms facility.

The Livestock Management Facilities Act (LMFA) provides for setbacks when the proposed facility is greater than 50 animal units and less than 1000 animal units as follows (Title 510 Section 35):[3]

> **Section 35. Setbacks for livestock management and livestock handling facilities.**
>
> (c) New livestock management or livestock waste handling facilities. Any new facility shall comply with the following setbacks:
>
> (1) For purposes of determining setback distances, minimum distances shall be measured from the nearest corner of the residence or place of common assembly to the nearest corner of the earthen waste lagoon or livestock management facility, whichever is closer.
>
> (3) For a livestock management facility or waste handling facility serving 50 or greater but less than 1,000 animal units, the minimum setback distance shall be ¼ mile from the nearest occupied residence and ½ mile from the nearest populated area.

The LMFA includes this definition of "populated area" as follows:

> **Section 10.60. Populated area.** "Populated Area" means any area where at least 10 inhabited non-farm residences are located or where at least 50 persons frequent a common place of assembly or a non-farm business at least once per week.

Clearly, the Peterville community of residences (15) qualifies as a populated area and the Illinois Department of Agriculture should have recognized this important fact – yet they have consistently not done so. Peterville residents have written to Brad Beaver at IDOA to alert him to these facts with no joy. It is important the FSA understand that the

---

[3] See: http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1720&ChapAct=510%A0ILCS%A077/&ChapterID=41&ChapterName=ANIMALS&ActName=Livestock+Management+Facilities+Act.

statute applies whether the state agency has acted accordingly. Proper siting in the case of Fanter Farms should be evaluated with respect to whether the proposed location is half-mile or greater from the nearest residence in the populated area as measured from the corner of the livestock management facility.

Nearby resident [redacted] made this public comment (submitted separately) regarding where his family lives and others within the half-mile setback:

> "We, along with 4 other families live within 1/4 of a mile of this site and nearly 20 residences are within 1/2 mile of this CAFO site. Our community will be directly and adversely impacted by the waste, toxic emissions, particulates from this CAFO. We are especially concerned about contamination our shallow wells which serve as our only drinking water source for the families that currently reside here."

Question: Will the FSA recognize that Peterville is a populated area and that the proposed Fanter Farms hog facility cannot be legally constructed in its current location due to the state mandated setbacks to populated areas?

2. Health Impacts of CAFOs. On page 15 of the FSA's EA, there is a statement that implies there are no adverse environmental or health effects:

> "The proposed action will not cause any adverse human health or environmental effects as defined in Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"."

The following discussion serves to educate the FSA so that they have a better understanding of the risks to human health from hog CAFOs. We contend that all humans have the right to clean air and clean water. There is an expectation that our government will not fund projects that cause harm to public health or the environment.

In a recent study published in the Proceedings of the National Academy of Science (PNAS), scientists determined the adverse impacts of the agricultural food system as follows:[4]

> "We also attribute total deaths from agricultural supply chain emissions to the production of specific commodities, which we combine into 16 groups (Fig. 1; "Commodity"). This analysis shows that 57% of deaths are from crops and 43% from livestock. However, a substantial portion of crops is used as animal feed and nonfood products (Fig. 1; "Product"). In attributing direct damages to final products, we find that 89% (15,900 deaths) of the total deaths caused by

[4] See: https://www.pnas.org/content/118/20/e2013637118

agriculture are linked to food production, with the remaining 11% (2,000 deaths) linked to biofuels and other nonfood products (e.g., plant and animal fibers)."

A health study performed in 2005 found that air pollutants at levels expected downwind from a hog facility adversely impact human subjects as follows:[5]

> "Aerial emissions from a swine house at North Carolina State University's field laboratory were diluted to a level that could occur at varying distances downwind from a confined animal feeding operation (CAFO) both within and beyond the property line, and these emissions were delivered to an environmental exposure chamber. The study design consisted of two 1-hr sessions, one in which 48 healthy human adult volunteers were exposed to diluted swine air and another in which they were exposed to clean air (control). Objective measures of blood pressure, temperature, heart rate, respiratory rate, lung function, nasal inflammation, secretory immunity, mood, attention, and memory were correlated with objective measures of air quality. Ratings of perceived (self-reported) health symptoms were also obtained.
>
> The mean levels of airborne constituents in the swine air condition were hydrogen sulfide (24 ppb), ammonia (817 ppb), total suspended particulates (0.0241 mg/[m. sup.3]), endotoxin (7.40 endotoxin units/[m.sup.3]), and odor (57 times above odor threshold). No statistical differences on objective measures of physical symptoms, mood, or attention resulted from the 1-hr exposure to swine emissions in the environmental chamber when compared with clean air for healthy human volunteers. However, subjects were 4.1 ($p = 0.001$) times more likely to report headaches, 6.1 ($p = 0.004$) times more likely to report eye irritation, and 7.8 ($p = 0.014$) times more likely to report nausea in the swine air (experimental) condition than in the control condition. These results indicate that short-term exposure in an environmental chamber to malodorous emissions from a swine house at levels expected downwind can induce clinically important symptoms in healthy human volunteers."

In a 2009, Drs. Rachel Horton and Steve Wing, among others, conducted a study of human health effects caused by industrial hog facilities in North Carolina. These are the results of that study as published in the Journal of Public Health:[6]

> "In a community-based, longitudinal study of neighbors of industrial hog operations, we observed associations among malodor, several airborne emissions, stress, and negative mood. Specifically, we observed increased reporting of stress and negative mood in response to increasing malodor. Additionally, increases in H2S and semi-volatile PM10, both odorous in nature, were associated with reported stress and 1 or more mood variables.

[5] See: https://pubmed.ncbi.nlm.nih.gov/15866765/
[6] See: https://pubmed.ncbi.nlm.nih.gov/19890165/

> Our findings complement a large literature on malodor as an environmental stressor. Malodor and concomitant airborne emissions do appear to trigger stress and negative mood in nearby residents unwillingly exposed at home.
> It is important to contextualize the effect of malodor on the lives of nearby residents. People who cannot afford air conditioning, clothes dryers, membership at a gym, and entertaining in restaurants depend on opening their windows for ventilation, drying their clothes outside, exercising in their yards, and entertaining family and friends in and around their homes.
>
> In ethnographic interviews, neighbors of industrial hog operations report that they refrain from gardening, walking, chores, and having cookouts with family and friends because of hog odor, and they report interruption of their sleep because of hog odor inside their homes. This is significant because physical activity, social support, and sleep are important for health."

3. Air Quality Review – Animal Numbers. On page 18 of 22, the FSA stated the following about potential air pollution from the proposed Fanter Farm hog facility:

> "The proposed farm would not be required to obtain an air permit in accordance with the EPA permitting authority, 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."

Question: Did the FSA calculate the air emissions for the proposed hog farm including particulates, ammonia, and volatile organic compounds? If so, what emission factors were used and what was the emission tonnage per year?

On page 4 of 54 of the Fanter Farms Livestock Waste Management Facility permit document, the engineer for the proposal provides this storage volume estimate:

> Construction of a single livestock waste handling facility that shall have the following dimensions:
>
> Maximum Length = 193 feet
> Maximum Width = 102 feet
> Maximum Depth = 10 feet
> Design Capacity -= 189,000 cubic feet [1,413,720 gallons]

The amount of feces and urine generated by 2400 head of finishing swine can be calculated using design factors from the Midwest Plan Services Manure Characteristics Table 6 as follows:[7]

[7] See: https://www-mwps.sws.iastate.edu/catalog/manure-management/manure-characteristics

2400 head x 0.89 gallons/head/day x 365 days/yr = 779,640 gallons/year

It is not clear why the engineer designed the deep pit to store nearly two years of liquid swine manure wastewater. Perhaps we need to evaluate the square footage of the proposed barn and assess the maximum capacity or stocking density to determine if the facility can only house 2400 hogs – perhaps it can house more than that.

Square footage of barn = 193 feet x 102 feet = 19,686 square feet

The Swine Extension website has an article that looks at stocking densities for various types of swine production facilities and has this assessment for stocking density related to swine finishing operations in the United States:

> "Recent survey results suggest the average stocking density for finishing facilities in the US is 7.2 ft2/pig, with a range of 6.8 to 8.0 ft2/pig [10]. Results from this survey do not suggest any regional (Southeast versus Midwest) differences in stocking density, nor do they suggest any difference in density for full versus partial slats."[8]

Using that range of stocking density, the Fanter Farms hog barn could house the following numbers of finishing hogs (both of which are greater than 2400 head):

19,688 ft2 divided by 6.8 ft2/pig = 2,895 head
19,688 ft2 divided by 8.0 ft2/pig = 2,460 head

2400 head x 8.0 ft2/pig = 19,200 ft2 space needed
2400 head x 6.5 ft2/pig = 16,320 ft2 space needed.

In the same Midwest Plan Services reference, the amount of nitrogen in the swine feces and urine can be calculated as follows:

2400 head x 0.09 lbs N/hd/day x 365 days/yr = 78,840 lbs nitrogen per year

The NRCS Animal Waste Management Field Handbook Chapter 11 Waste Utilization states that up to 30% of the nitrogen is lost to volatilization from a deep pit facility. The amount of nitrogen volatilized (as ammonia) can be calculated as follows:[9]

78,840 lbs N/year x 0.30 = 23,652 lbs N per year or 11.8 tons per year

Over a 20 year lifespan, this proposed facility will exhaust 473,040 pounds of nitrogen (ammonia) into the neighboring community along with the odors and pathogens.

[8] See: https://swine.extension.org/space-allocation-decisions-for-nursery-and-grow-finish-facilities/
[9] See: https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/water/?&cid=stelprdb1045935

The peculiar laws of Illinois allow the expansion of the facility once it is constructed without further public review. This is the pertinent part of the LMFA:

> **"Section 10.45. New facility.** "New facility" means a livestock management facility or a livestock waste handling facility the construction or expansion of which is commenced on or after the effective date of this Act. Expanding a facility where the fixed capital cost of the new components constructed within a 2-year period does not exceed 50% of the fixed capital cost of a comparable entirely new facility shall not be deemed a new facility as used in this Act."

That means the facility can continue to expand with no further consideration to the proximity to residences and populated areas. In Illinois, this is why communities become concerned about new facilities that have animal numbers just under the amount that triggers public hearings and the submittal of nutrient management plans (how the waste is land applied). This lack of transparency fostered by poorly conceived law must be considered when evaluating a proposed "medium AFO".

4. Air Quality Review – Adverse Impacts. On page 19 of 22, the FSA stated the following about the purpose of barn ventilation and how that may impact air pollution downwind:

> "Odor would be controlled through the management of the barn's ventilation systems, as required by the integrators for livestock health. Exhaust fans are used to capture a portion of the particulate to reduce emissions and also dilution of odors caused through the mixing of ambient air and is a function of distance, topography, and meteorological conditions. Industry best practices are used to reduce effects to air quality, including the elimination of storage lagoons, and injecting waste directly into the soil to minimize exposure to the air."

It is true that the number one purpose for barn ventilation is to protect the housed livestock from toxic air pollutants inside the barn. The second important reason for barn ventilation is to control the temperature and moisture content to insure animal comfort.

The rest of this statement by the FSA is illogical and not an accurate portrayal of air pollution impacts from deep pit swine waste management systems.

Exhaust fans do not capture anything – they move air from inside the barn to the outside of the barn and while doing so transport air pollutants, such as dust, ammonia, pathogens, and volatile organic compounds. The Fanter Farms proposed hog barn will not have any air pollution control equipment, such as biofilters, that could capture and destroy these air pollutants. Instead, the barn ventilation exhausts the air pollutants which can then be transported throughout the surrounding community day in and day out every single day that there are animals and liquid swine manure in the facility.

The recently published research by PNAS mentioned earlier in these public comments also includes this statement about air quality impacts from livestock production:

> "Poor air quality is the largest environmental health risk in the United States and worldwide, and agriculture is a major source of air pollution. Nevertheless, air quality has been largely absent from discussions about the health and environmental impacts of food. We estimate the air quality–related health impacts of agriculture in the United States, finding that 80% of the 15,900 annual deaths that result from food-related fine particulate matter ($PM_{2.5}$) pollution are attributable to animal-based foods. By estimating these impacts and exploring how to reduce them, this work fills a critical knowledge gap. Our results are relevant to food producers, processors, and distributors, and to policymakers and members of the public interested in minimizing the negative consequences of food."

Deep pit hog facilities store feces and urine in a concrete pit located below the slatted floor. The liquid swine manure generates many gases while in storage, including but not limited to methane, ammonia, hydrogen sulfide, and volatile organic compounds.

The pit fans located along the perimeter of the hog barn are designed to remove these toxic gases from the pit to prevent the gases from rising through the slatted floor and into the living space of the hog facility. This is done to protect the hogs from the toxic gases. The pit fans exhaust this toxic air to the outside of the barn and into the ambient environment.

The following information about pit fan air pollution can be found at the Iowa State website entitled Air Management Practices Assessment Tool (AMPAT):[10]

> "Research shows that pit fans exhaust have proportionally higher emissions of several gases than do wall fans. Jacobson et al (2007, 2008) tested emissions from a deep pit swine building with and without pit ventilation. They found that the majority (75 to 80%) of NH3 and H2S emissions originated from the pit exhaust fans even though they only provided 20 to 30% of the barn's ventilation air. Concentrations of particulate matter less than 10 microns (PM10) were the same in air leaving the wall fans as that leaving the pit fans with the except of winter. During winter pit fans had lower PM10 concentrations than did wall fans, presumably because dust particles collect more on the condensation on pit walls during cold weather."

[10] See: https://www.extension.iastate.edu/ampat/pit-ventilation

Figure 4 – Image of a typical pit fan located on the outside of a hog barn (AMPAT).

In a 2006 journal article published by the Journal of Air and Waste Management, Stephen Hoff and others made this statement about air pollution during the removal of liquid swine manure from a deep pit finisher:[11]

> "It is a common practice in the midwestern United States to raise swine in buildings with under-floor slurry storage systems designed to store manure for up to one year. These so-called "deep-pit" systems are a concentrated source for the emissions of ammonia (NH3), hydrogen sulfide (H2S), and odors.
>
> As part of a larger six-state research effort (U.S. Department of Agriculture-Initiative for Future Agriculture and Food Systems Project, "Aerial Pollutant Emissions from Confined Animal Buildings"), real-time NH3 and H2S with incremental odor emission data were collected for two annual slurry removal events. For this study, two 1000-head deep-pit swine finishing facilities in central Iowa were monitored with one-year storage of slurry maintained in a 2.4 m-deep concrete pit (or holding tank) below the animal-occupied zone.
>
> Results show that the H2S emission, measured during four independent slurry removal events over two years, increased by an average of 61.9 times relative to the before-removal H2S emission levels. This increase persisted during the agitation process of the slurry that on average occurred over an 8-hr time period.
>
> NH3 emission during agitation increased by an average of 4.6 times the before-removal emission level and increased by an average of 1.5 times the before-removal emission level after slurry removal was completed. Odor emission increased by a factor of 3.4 times the before-removal odor emission level and decreased after the slurry-removal event by a factor of 5.6 times the before-removal emission level."

[11] See: https://pubmed.ncbi.nlm.nih.gov/16739794/

In a 2016 article published by the Journal of Occupational and Environmental Hygiene, researchers looked at bioaerosols, odors, and hydrogen sulfide downwind from hog confinements in Iowa as follows:[12]

> "We assessed airborne toxicants upwind, in-barns and downwind and evaluated determinants of exposure. Inhalable particulate matter, endotoxin, odor threshold, hydrogen sulfide, culturable mesophilic bacteria, culturable fungi, and total airborne microbes along with wind speed, temperature, and humidity were measured at separate midsized livestock facilities (1 hoop, 1 confinement) in Central Iowa on ten occasions over two years.
>
> Significant differences in contaminants were observed between hoops and confinement buildings and across seasons for endotoxin, odors, airborne microorganisms, and hydrogen sulfide. For hoops and confinements, respectively, geometric mean in-barn concentrations were 3250 and 3100 EU/m3 for endotoxin; 1400 and 1910 µg/m3 for particulates; 19.6 and 146 ppb for hydrogen sulfide; 137 and 428 dilutions for odor threshold; and 3.0×106 and 1.5×106 organisms/m3 for total microbes.
>
> Endotoxin, odor, and culturable microorganisms exceeded recommended exposure limits. Reduced analysis of variance models for these contaminants demonstrated differences by barn type, season, number of pigs, and, in some cases, temperature and humidity. Both types of swine operations produced high airborne concentrations of endotoxin, odor, hydrogen sulfide, bacteria and fungi. Endotoxin and odors were found downwind at concentrations previously associated with adverse health effects."

A 2012 article published by Chemosphere includes an intensive review of the literature with respect to the types of volatile organic compounds generated at hog facilities. The article contains a multitude of studies over the past twenty years as follows:[13]

> "5.2. Classification of VOCs
> Schiffman et al. (2001) concluded that the compounds were diverse in nature. The authors classified 324 VOCs and seven fixed gases identified in swine barn air and lagoon wastewater into acids, alcohols, aldehydes, amides, amines, aromatics, esters, ethers, fixed gases, halogenated hydrocarbons, hydrocarbons, ketones, nitriles, other nitrogen-containing compounds, phenols, sulfur-containing compounds, and steroids. An ''unclassified'' group included 16 compounds (Fig. 2, top).

[12] See: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4844821/
[13] See: https://pubmed.ncbi.nlm.nih.gov/22682363/

> Some of these groups can be further classified as subgroups. For example, Clanton and Schmidt (2000) grouped sulfur-containing compounds from manure into three categories: sulfides, mercaptans, and thiophene. Some of the compounds can be classified into more than one group. For example, sulfur dioxide and hydrogen sulfide are listed as fixed gases and also as sulfur-containing compounds by Schiffman et al. (2001).
>
> In addition to the groups of VOCs reported by Schiffman et al. (2001), Blunden et al. (2005) also found various paraffins and olefins at a total of five swine facilities in North Carolina. Furthermore, Ciganek et al. (2000) quantified 45 semi-volatile gaseous-phase and solid-phase organic compounds in indoor and outdoor air samples at pig and cattle farms. These VOCs were grouped in polycyclic aromatic hydrocarbons (PAHs), nitro-substituted PAHs (nitro-PAHs), oxygenated PAHs (oxy-PAHs), polychlorinated biphenyls (PCBs), and organic chlorinated pesticides (OCPs).
>
> Another classification that was based on more than 100 VOCs identified at animal facilities was made by Ciganek and Neca (2008). The authors divided all the VOCs into oxygenated compounds and aromatic hydrocarbons, each of which contained several subgroups (Fig. 2, bottom)."

5. Endangered and Threatened Species. In Illinois, state and federal endangered and threatened species are tracked by the Illinois Department of Natural Resources (DNR).[14] A list of endangered and threatened species by county is available and includes the following items for Mason County:[15] In that DNR publication, the list includes 42 species of plants, amphibians, birds, and aquatic life.

In 2012, there were several state and federally funded initiatives to study and preserve habitats of the Illinois chorus from within Mason County and others in Illinois:[16]

> "Illinois Chorus Frogs (*Pseudacris illinoensis*) occur in west-central and southwestern Illinois, southeastern Missouri, and northeastern Arkansas. They are listed as a Species of Special Concern in all three states and threatened in one (IL). The Illinois Chorus Frog is a habitat specialist, requiring fine, sandy soils for aestivation and ephemeral (seasonally flooded) wetlands or fishless ponds for reproduction. Suitable conditions are limited geologically to those areas represented by the species' range and distributed patchily within it."

[14] See: https://www2.illinois.gov/dnr/ESPB/Pages/default.aspx
[15] See: https://www.dnr.illinois.gov/ESPB/Documents/ET_by_County.pdf
[16] See: https://www.dnr.illinois.gov/conservation/IWAP/Documents/SWGReportSegments/T-62%20D-1%20GS%20-%20Hab.%20Con.%20Init.IL%20Chorus%20Frog.pdf

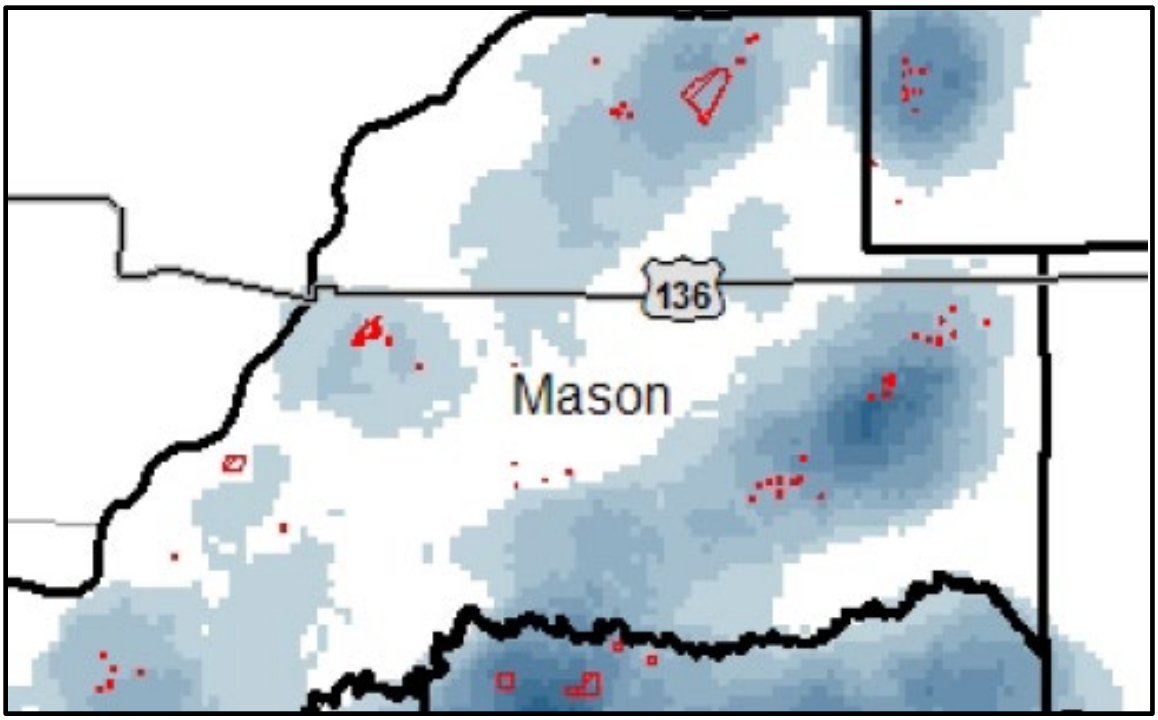


Figure 5 – View of Chorus Frog habitats in Mason County from DNR map (2012).

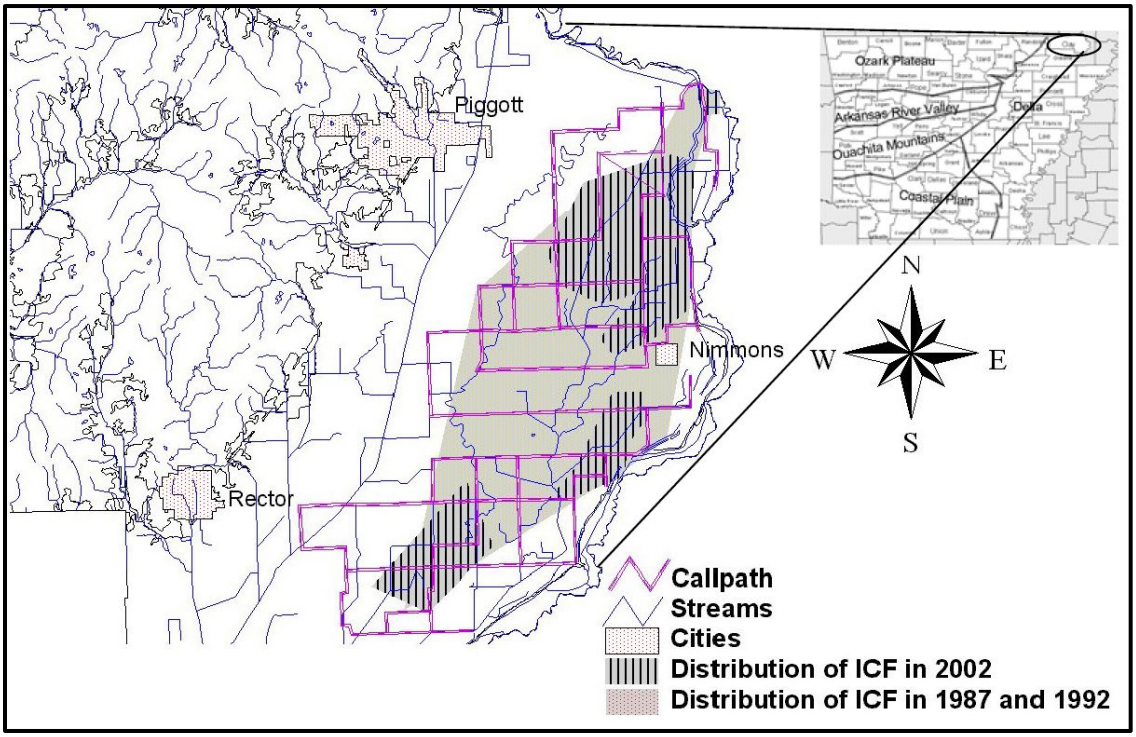


Figure 6 – Extent of chorus frog habitat in Clay County, Arkansas (2018).

The Illinois DNR webpage for the Illinois Wildlife Action Plan includes information about various state strategies to identify and protect vulnerable species:[17]

> "The Illinois Wildlife Action Plan (IWAP) guides the conservation of wildlife and their habitats for the people of Illinois. The plan focuses primarily on non-game species, especially vulnerable species, known as the Species in Greatest Conservation Need (SGCN). The IWAP is organized by habitat into seven Campaigns, each with its own strategic plan for increasing the quality and quantity of wildlife habitat in Illinois."

There are 17 pages of Species in Greatest Conservation Need in Illinois. This list includes the Illinois Chorus Frog among others.[18]

In 2018, Arkansas State University published their report of efforts in Arkansas to identify and preserve habitat and monitor for the presence of Illinois chorus frog:[19]

> "The Illinois chorus frog is endemic to disjunct sand prairies extending from Clay County in northeastern Arkansas, across the boot heel of southeastern Missouri, and northward along the Mississippi and Illinois rivers into Illinois (Conant and Collins, 1998; Trauth et al. 2004)."

Similarly, in Missouri there is an effort to protect species habitat for the Illinois Chorus Frog (emphasis added):[20]

> "Historically, the Illinois chorus frog occurred throughout sandy grasslands in southeastern Missouri. Its present range includes isolated populations associated with specific soil types in Mississippi, Scott, Dunklin, and New Madrid counties.
>
> Listed as imperiled by the Missouri Department of Conservation and **is currently a candidate for federal listing by the U.S. Fish and Wildlife Service.** It occurs only in parts of Illinois, the Missouri Bootheel, and one county in extreme northeastern Arkansas. Formerly considered a subspecies of the Strecker's chorus frog, in 2004 the Illinois chorus frog was given full species status."

The point trying to be made here is that there is a multi-state effort to identify and protect the habitat of the Illinois Chorus Frog. In Illinois, the Mason County habitat has been identified in the general vicinity of the proposed Fanter Farms hog facility (See Figure 5 map of known habitats in dark blue shading and red areas).

---

[17] See: https://www2.illinois.gov/dnr/conservation/IWAP/Pages/default.aspx
[18] See: https://www2.illinois.gov/dnr/conservation/IWAP/Documents/SGCN2015%20Appendix%201.pdf
[19] See: https://www.biorxiv.org/content/10.1101/338699v1.full
[20] See: https://mdc.mo.gov/discover-nature/field-guide/illinois-chorus-frog

Figure 7 – Habitat location of Illinois Chorus Frog in southeastern Missouri.

6. Preserving Prime Farmland. On page 15 of 22, the FSA states the rationale for excluding the impact on land resources as follows:

> "Effects to land resources were eliminated from detailed analysis.
>
> The soils in the project area are all considered prime farmland and/or farmland of statewide importance. Since the proposed project involves construction of a swine facility which qualifies as an on-farm structure necessary for the farm operation, it is exempt from the farmland provisions of the Farmland Protection Policy Act, NRCS's Implementation Rule, and Departmental Regulations/Land Use Policy. Considering the exemption, FSA has determined that there will be no effect to important land resources."

In the FSA document titled "Regulatory Streamlining of FSA Direct Farm Loan Programs", there is a section that explains the evaluation method for determining if a federally funded project will have adverse impacts to prime farmland:[21]

> **Significant Issue #1—Land Use:** Over the past several decades, population growth and urban sprawl have decreased the farming land-base. A trend toward fewer farms and larger farm size has also been observed. Implementation of the proposed action may have effects, both beneficial and adverse, to land-use dynamics. All Federal agencies are required to analyze the effects of their actions on soils classified as prime or unique by the Natural Resource Conservation Service (NRCS), as required by the CEQ in a memorandum of August 1980. The Farmland

[21] See: https://www.federalregister.gov/documents/2004/02/09/04-1891/regulatory-streamlining-of-the-farm-service-agencys-direct-farm-loan-programs

Protection Policy Act of 1981, as amended, also requires Federal agencies to consider adverse effects to prime and unique farmlands that would result in conversion of prime and unique farmland to non-agricultural uses.

Prime farmland is defined as soil that particularly produces general crops as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables and nuts. The proposed rule will be analyzed to determine the anticipated effects of its implementation on land uses nationwide. The indicators for impacts will be:

Acres of farmland converted to non-farm uses as a result of the proposed action

Anticipated change to number of farms and average farm size as a result of implementing the proposed action

While it may be true that a hog barn used to raise finishing hogs can be classified as agriculture, one cannot conclude that prime farmland is 'protected" because someone built a hog farm and hog farms are agriculture. The very action of construction destroys the farmland by removing the topsoil and then excavating a massive hole 10 feet deep, over 100 feet wide, and 200 feet long. The area where the hog facility would be built will never be prime farmland again.

7. Mahomet Aquifer – Sole Source Aquifer. On page 17 of 22, the FSA states the following with respect to their efforts to evaluate impacts to the Sole Source Aquifer:

"Considering the sensitive nature of the Mahomet Aquifer, FSA consulted directly with EPA Region 5 staff responsible for the Sole Source Aquifer Program. FSA identified the proposed barn and manure application site to support EPA analysis. Furthermore, FSA provided details regarding the design of the proposed barn and swine operation. The following conditions and best management practice

Insert results of consultation with EPA, for any SSA BMPs or requirements – still consulting…"

Question: Why did the FSA go out for public notice on a draft Environmental Assessment that is incomplete in one of the most important sections of the evaluation?

The designation of the Mahomet Aquifer as a Sole Source Aquifer is a recent event. As such, the processes to develop long-term methods to protect this resource are in their beginning stages. The USEPA website for the aquifer provides this background:[22]

"On March 11, 2015 EPA designated a portion of the Mahomet Aquifer system in east-central Illinois as a sole source aquifer. More than half of the population in

[22] See: https://www.epa.gov/il/mahomet-sole-source-aquifer

east-central Illinois relies on the Mahomet Aquifer system as a source of drinking water. See Sole Source Aquifers for Drinking Water

The Safe Drinking Water Act gives EPA authority to designate all or part of an aquifer as a "sole source" if contamination of the aquifer would create a significant hazard to public health and there are no physically available or economically feasible alternative sources of drinking water to serve the population that relies on the aquifer.

The designation authorizes EPA review of projects that receive Federal financial assistance to assess potential for contamination of the aquifer system that would create a significant hazard to public health."

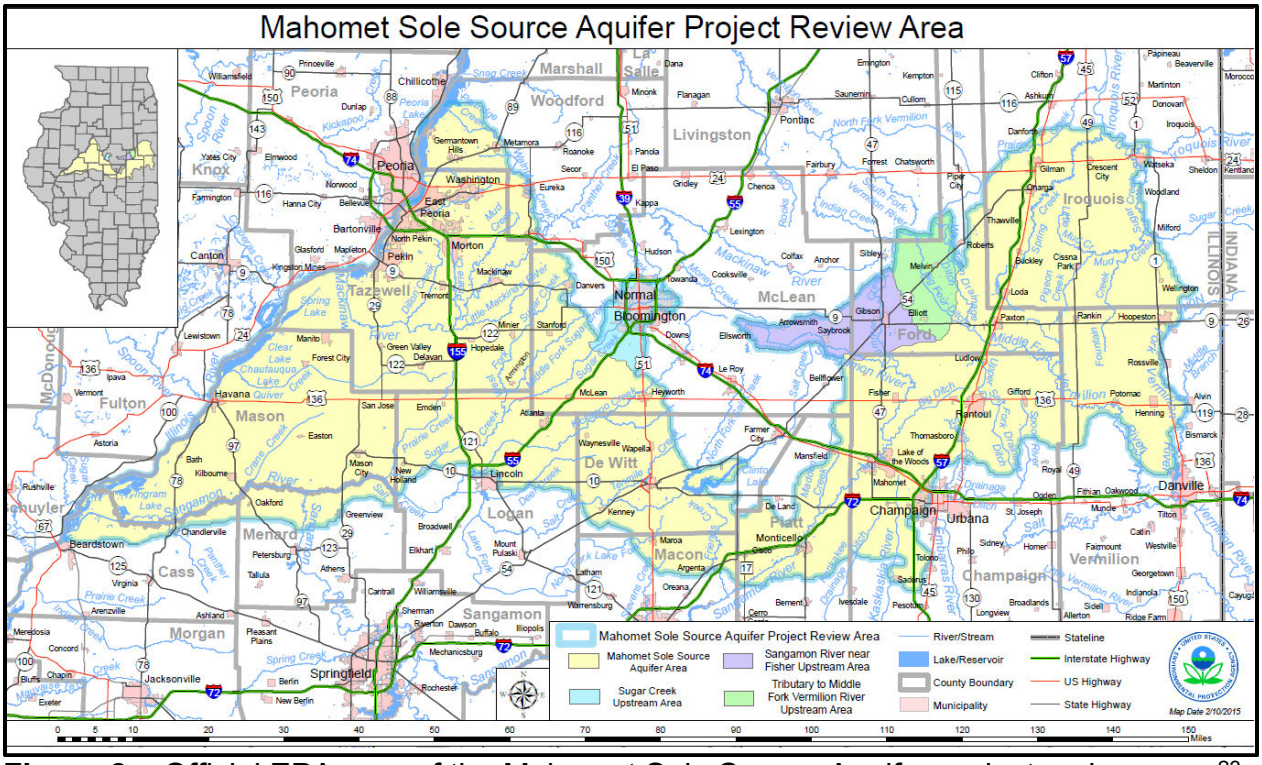


Figure 8 – Official EPA map of the Mahomet Sole Source Aquifer project review map.[23]

The Mahomet Aquifer has been studied for some time, including efforts by the Mahomet Aquifer Consortium established in 1998.[24] The Mahomet Aquifer Protection Task Force was created by Illinois legislature in 2017 via Public Act 100-0403.[25] The Task Force webpage hosted by the Illinois EPA is a centralized location for information on meetings and reports.[26]

[23] See: https://www.epa.gov/sites/production/files/2016-02/documents/mahomet-ssa-project-review-area-map-20150210.pdf

[24] See: http://www.mahometaquiferconsortium.org/info-current.html

[25] See: https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=100-0403

[26] See: https://www2.illinois.gov/epa/topics/community-relations/sites/mahomet-aquifer-task-force/Pages/default.aspx

Figure 9 – Closeup view of the portion of Mahomet Aquifer in Mason County.

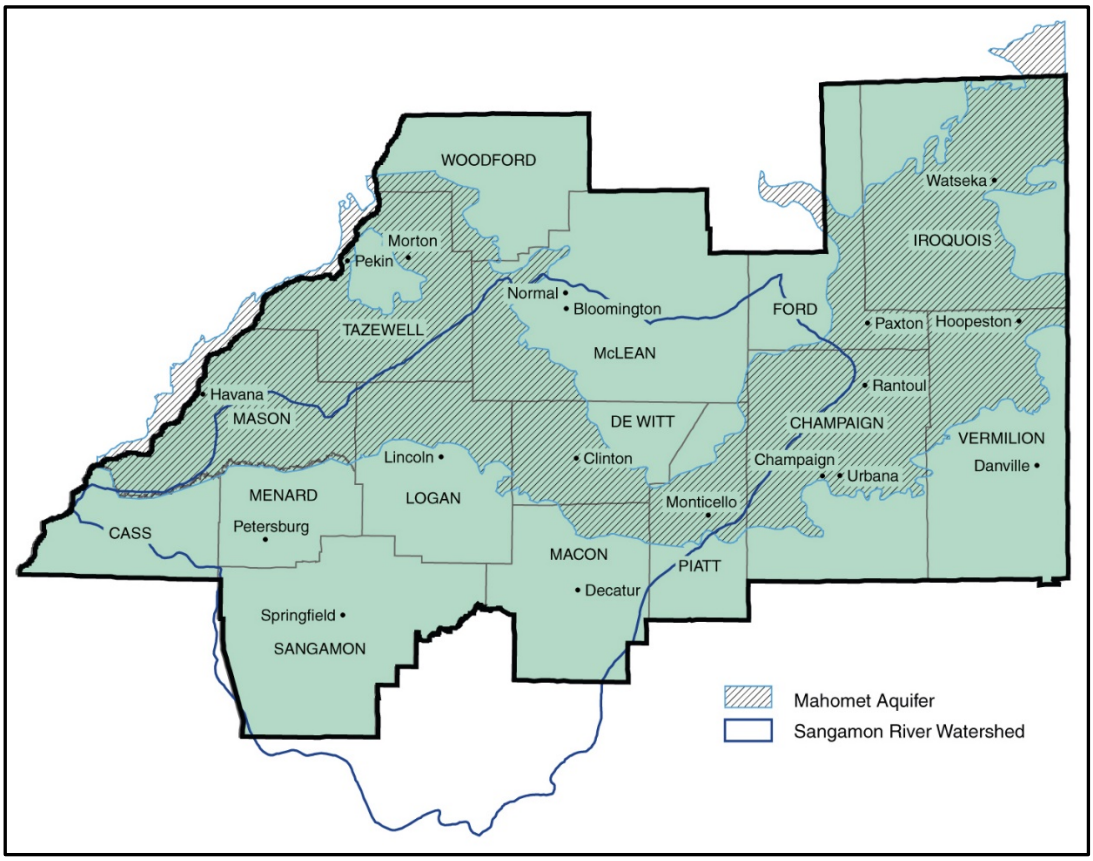


Figure 10 – Mahomet Aquifer and Sangamon River Watershed outline (Mahomet Aquifer Consortium).[27]

[27] See: http://www.mahometaquiferconsortium.org/aboutmac.html

In their 2018 report, the Mahomet Aquifer Protection Task Force made these recommendations related to nitrate issues within the aquifer watershed – several of which tie directly to agricultural practices and thus are germane to the FSA's environmental assessment (emphasis added to items that include agricultural best management practices and feedlots):[28]

> **Nitrate (threat of contamination)**
> Continue to raise awareness of the Nutrient Loss Reduction Strategy (NLRS) and implementation efforts in existence to improve water quality and reduce nutrient loss into Illinois waterways.
>
> Continue to fund scientific research of **agricultural best management practices** (BMPs) and wastewater treatment plant technologies that can continue to reduce nutrient loss into Illinois waterways and groundwater.
>
> Expand cost-share opportunities to farmers to encourage adoption of BMPs that add expense and risk to farming operations.
>
> Centralize the nitrate concentration data collected by the county public health departments.
>
> Review nitrate data to determine the location, depth, and construction of wells vulnerable to nitrate contamination.
>
> Develop recommendations to avoid high-nitrate zones when constructing new wells.
>
> Discourage the use of shallow sand points.
>
> Promote the public health guidelines to private well owners concerning setbacks for septic systems, **feedlots,** and other sources of nitrate.

Another section of the Task Force 2018 Report that should be considered relative to the proposed Fanter Farms hog facility relates to recommendations about Source Water (emphasis added to section on setbacks and well drilling/abandonment):

> **Source water susceptible to contamination (threat of contamination)**
> Develop source water protection plans pursuant to 35 Ill. Adm. Code 604 Subpart C, after the effective date of adoption, for the community water supplies (CWS) determined to be susceptible to groundwater contamination.

[28] See: https://www2.illinois.gov/epa/topics/community-relations/sites/mahomet-aquifer-task-force/Documents/MAHOMET%20AQUIFER%20PROTECTION%20TASK%20FORCE%20FINDINGS%20AND%20RECOMMENDATIONS%202018.12.21.pdf

Implement measures identified in the source water protection plans to protect groundwater using existing authorities (e.g., **maximum setback zones**, overlay zoning ordinances, pollution prevention, best management practices, regulated recharge areas, local government ordinances, etc.). More information on these authorities is available on the Task Force website.

Closely monitor **well drilling and well abandonment** (potential routes of groundwater contamination) in areas with adopted ordinances or environmental land-use covenants that prohibit new potable well drilling in areas were risk-based remediation has occurred.

This legislative session, Illinois SB 2515 serves to create a permanent Mahomet Aquifer Council composed of nine members with various terms and requirements. The Bill passed both houses with amendments and has been sent to the Governor.[29]

The federal Advisory Committee on Water Information (ACWI) prepared a report titled "Including the Mahomet Teays Aquifer System in a National Groundwater Monitoring Network" that includes a description of the groundwater monitoring network (2009).[30]

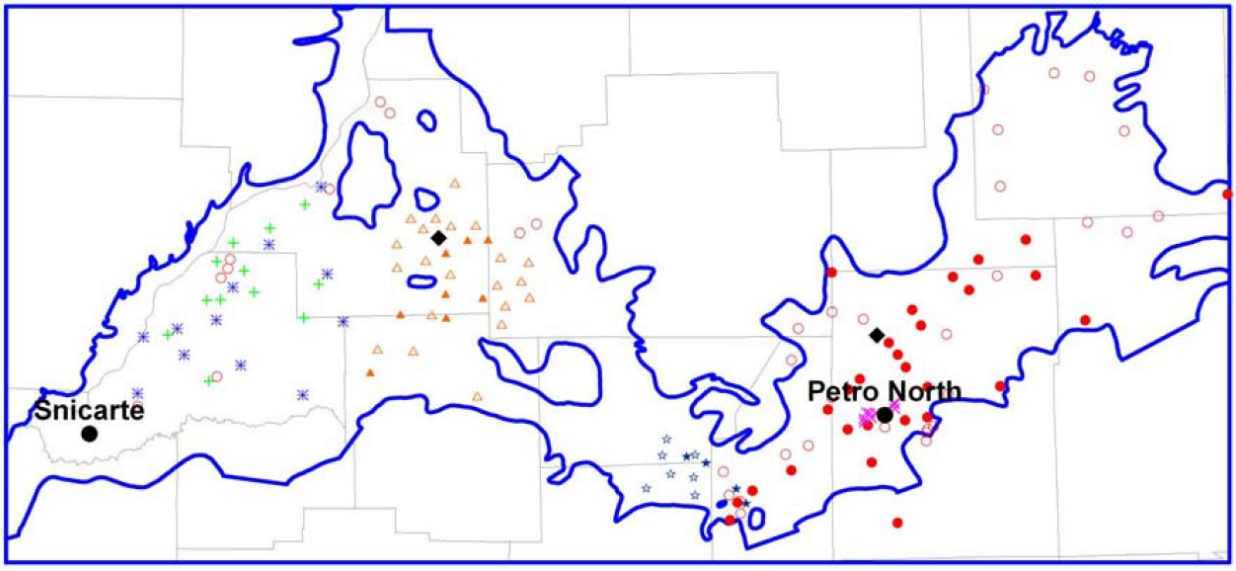


Figure 11 - Mahomet Aquifer observation wells in Illinois

The observation well effort is described in the ACWI Statement of Interest as follows:

"The ISWS operates an observation well "network" composed of over 180 wells at over 140 sites (figure 3), largely comprised of wells especially built for

[29] See: https://www.ilga.gov/legislation/BillStatus.asp?DocNum=2515&GAID=16&DocTypeID=SB&LegId=135169&SessionID=110&GA=102

[30] See: https://acwi.gov/sogw/pubs/tr/5-statements/Il-id_soi_mahomet_teays_aquifer.pdf

monitoring aquifer conditions (i.e., water levels and quality). Numerous sites contain “nested” observation wells to monitor the Mahomet Aquifer, overlying confined units, and the water table. Geologic records and construction details of these wells are available. Water level observations generally are collected on a monthly or quarterly basis with selected wells containing digital dataloggers polling water levels as often as hourly. Numerous local and state entities fund a cooperative ISWS/ISGS drilling and monitoring effort.

On the west, the Imperial Valley Water Authority has outfitted 11 wells (blue asterisks) with dataloggers for long-term water level monitoring. Also in this region are wells constructed for the Illinois Department of Agriculture (green crosses) for agrichemical sampling and ISWS wells (brown circles) for local resource development monitoring. Just east of this area are ob-well sites (orange triangles) maintained via funding from the Long Range Water Plan Steering Committee, a coalition of local water authorities, counties, and communities.”

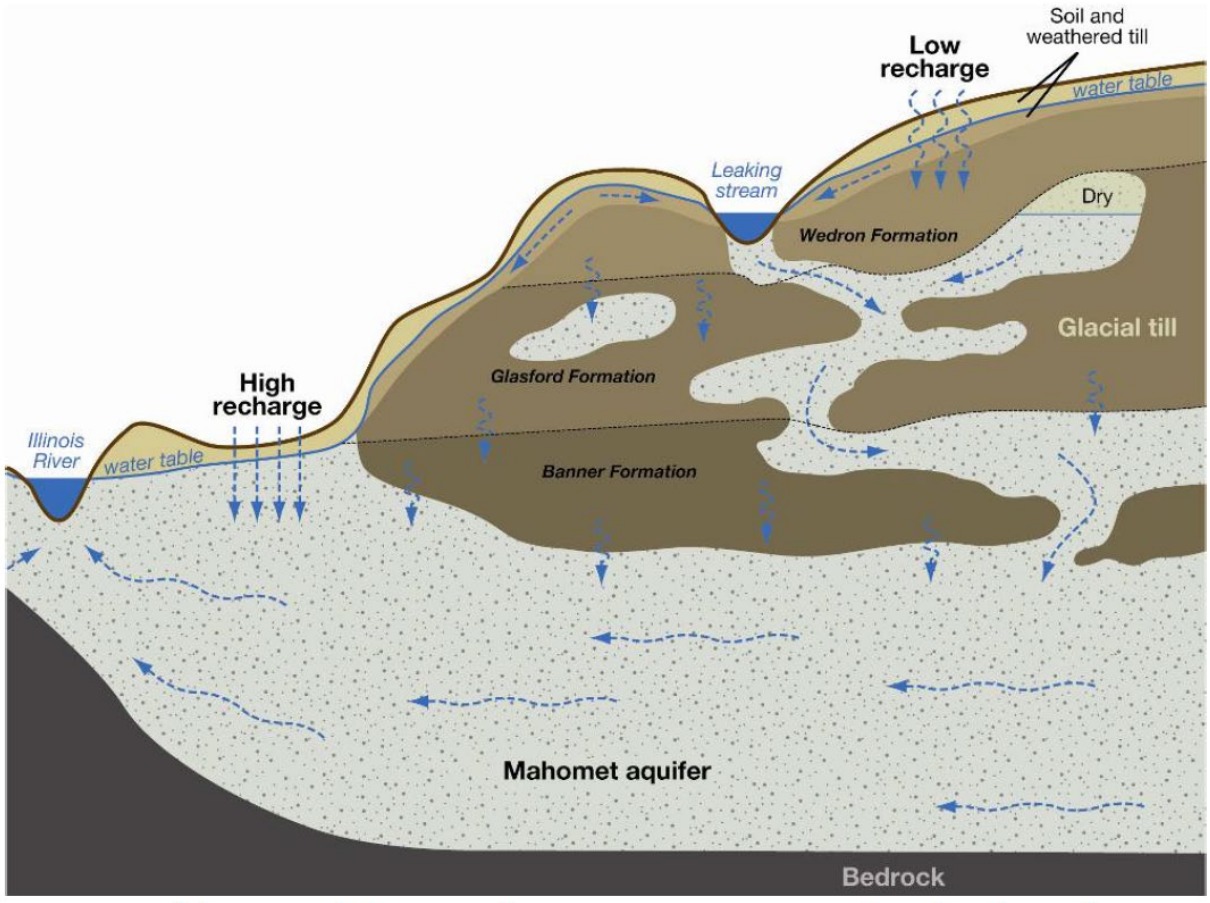


Figure 12 – ACWI groundwater flow model for Mahomet Aquifer showing high recharge area near the Illinois River on the west side of the system.[31]

[31] See: https://acwi.gov/sogw/pubs/tr/5-statements/Il-id_soi_mahomet_teays_aquifer.pdf

The USGS Map Viewer website was used to search for water wells in Mason County near the proposed Fanter Farms facility (See Figure 11).

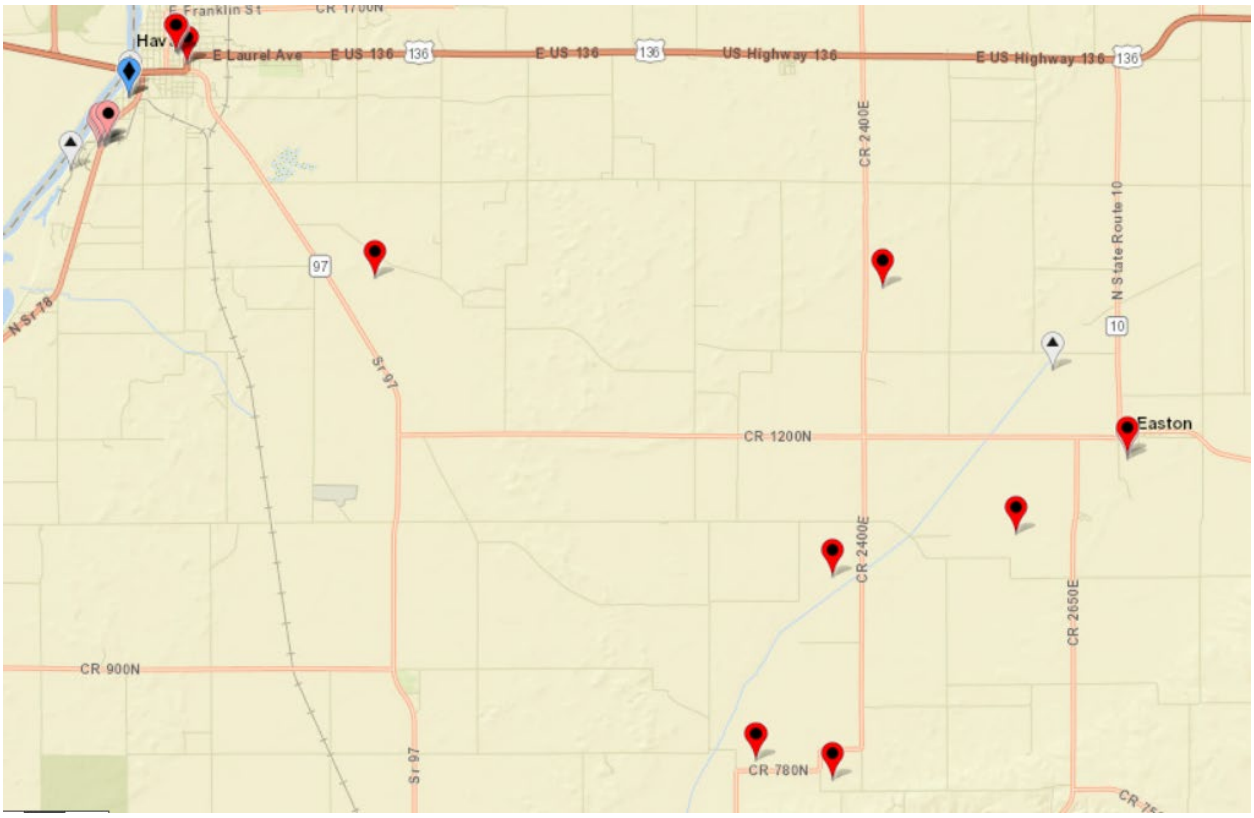


Figure 11 – Location of water wells south and east of Havana, Illinois courtesy of the USGS National Map Viewer website.[32]

Starting with the well located just north of Peterville and just east of State Road 97, the following information was retrieved:

> Latitude 40°15'42", Longitude 90°00'47" NAD27
> Mason County, Illinois, Hydrologic Unit 07130003
>
> Well depth: 20 feet
> Hole depth: 20 feet
> Land surface altitude: 490 feet above NGVD29.
> Well completed in "Sand and gravel aquifers (glaciated regions)" (N100GLCIAL) national aquifer.
> Well completed in "Quaternary System" (110QRNR) local aquifer

The well located directly east along County Road 2400 East is described as follows:

[32] See: https://www.usgs.gov/core-science-systems/national-geospatial-program/national-map

Latitude 40°15'37", Longitude 89°53'57" NAD27
Mason County, Illinois, Hydrologic Unit 07130008

Well depth: 115 feet
Hole depth: 115 feet
Land surface altitude: 499 feet above NGVD29.
Well completed in "Sand and gravel aquifers (glaciated regions)" (N100GLCIAL) national aquifer.
Well completed in "Quaternary System" (110QRNR) local aquifer

Anecdotal information about water wells among residents of Peterville include the following:

James Farwell "I have 2 wells on my property, a primary one for my home and one that is used for my garden / pool and general outdoor use, both are in excess of 20 years old, my primary well is 60 feet deep, with the well head located 6ft below grade it is a metal cased driven well (deep well jet pump-packer type), The secondary well is 46 ft with the well head at grade also driven metal cased. "

Kay Curtis "Most of the water sources are sand points put in years ago. At our house up on top of a sand hill they hit enough water to adequately supply the house and family needs at 30'. Down the hill is a really deep well for irrigation. It was drilled sixty years ago so records are long gone. I am sure it supplies more than 250 gallons per minute. It is the high water volume well in the field. The deep well at the shop Is only about sixty feet. None of the wells are cement lined. The pipe was steel for years, but we had it pulled a couple of years ago so now it is PVC. While building fence corner posts they used to hit water at 10' even when it's dry. Right now, the water from rain is on top of places where the aquifer is above the surface." (See Figures 12 and 13 at end of public comments)

The FSA Environmental Assessment should include a complete section on the Sole Source Aquifer including the evaluation by USEPA Region III before publishing public notice. It is impossible for the public to prepare a critical assessment of the conclusions made by the FSA without being able to read them.

9. Manure Management at Fanter Farms. The FSA makes several assumptions about how liquid swine manure wastewater will be handled at the proposed site, such as this statement on page 17 of 22:

"The site is located in the uplands and far removed, over one-mile, from any surface water resources. Manure would be reused as fertilizer for plant uptake and injected directly into cropland at approved agronomic rates properly managed by the owner and the commercial custom applicator."

The proposed hog facility, by virtue of its size and classification as a medium AFO, does not have to submit a nutrient management plan (NMP) to the Illinois Department of Agriculture. Therefore, there is not a publicly available NMP that could be reviewed by the FSA or any interested parties.

Question: Why does the FSA believe that Fanter Farms will be injected wastewater and using a commercial custom applicator? Did Fanter Farms provide a nutrient management plan, and if so, why wasn't that document included in the EA attachments in the FOIA response? Did the FSA look at land application maps to determine where the manure wastewater will be disposed? According to aerial images, the facility is surrounded by center pivot irrigation and those fields would not be conducive to injection land application methods.

On page 18 of 22, the FSA contends that over a million gallons of concentrated swine manure wastewater held in a massive concrete pit would not pose a hazard to ground water:

> "The Concrete storage structure would hold no less than the amount of waste generated by the facility during a full year's operation at full capacity based on a planned 10' storage pit. Manure would be properly managed to not result in infiltration to groundwater resources. Furthermore, the conditions and best management practices required by the EPA to ensure protection of the Mahomet Aquifer would be implemented to ensure avoidance of any groundwater impacts."

Question: Which EPA best management practices (BMPs) is FSA referring to in the above quote and how would the Illinois Department of Agriculture and/or the Illinois EPA enforce these BMPs?

The original design for the deep pit was a depth of 8 feet. The depth was changed to 10 feet without explanation by the design engineer. The resulting storage capacity (as calculated earlier in these public comments) is considerably more volume than is needed to store one year's worth of hog feces and urine.

State law requires that a soil boring be advanced a minimum of 5 feet below the depth of the waste storage facility to determine if aquifer materials are present. The soil boring log which FSA uses as an attachment to their EA clearly shows that the entire depth to which the concrete manure storage structure will be built is in aquifer material. It is inappropriate for the FSA to automatically assume there will be no threat to groundwater quality in this instance because the waste structure will be sitting in the aquifer rather than not located in aquifer material.

10. Alternative Locations. On page 10 of 22, the FSA contends that an alternative location is not feasible and would offer no additional environmental protections as follows:

> "Selecting an alternative location would consist of moving the proposed project to a different site within the property boundaries or to another parcel of land. Relocating the project would not offer environmental benefits and likely have a greater impact on the affected environment. Construction of the barn at the proposed location would be compliant with all applicable laws and regulations. The applicant has secured access to the land selected for the proposed barn. It may not be possible for the applicant to secure access to another location that meets the criteria for the proposed project. If the applicant were to select an alternative site, they could incur additional costs and delay. A change to the site location may also result in additional environmental impacts since the proposed site is vacant land with limited sensitive environmental resources present. This location also provides ready access to family owned or controlled farm real estate, allowing for manure use as fertilizer and requiring less transportation. This alternative offers no benefit and is not feasible."

A quick google search of "land available for sale in Illinois" produced several commercial websites that showcase farmland for sale in Illinois. For example, this website has over 400 locations available for farmland without a residence either by sale or by auction.

> https://www.landsofamerica.com/Illinois/farms/no-house/is-active/
> Land for sale including Farms in Illinois - 1 - 25 of 435 listings

This commercial website includes 29 pages of farmland opportunities that can be further refined to sites for sale and/or auction and by the minimum and maximum acreage:

https://www.landandfarm.com/search/Illinois/Farm-for-sale/?src=google&medium=cpc&gclid=CjwKCAjwz_WGBhA1EiwAUAxIcZfphsXTj3Yk2ICHIORy-JFyR0wHwDZKiQt0Q0QCjh-DNqfzw1qAHBoCS24QAvD_BwE&gclsrc=aw.ds

This commercial website boasts:

> "LandWatch data lists $5 billion of land parcels and ranches for sale in Illinois. With tens of thousands of properties and rural land for sale in the state, LandWatch features a combined 120,864 acres of land for sale in the state. The average price of land parcels and ranches for sale in Illinois is $350,740."
>
> https://www.landwatch.com/illinois-land-for-sale

Clearly, there are many opportunities for the applicant to buy farmland in Illinois that is not near a populated area or on top of a sole source aquifer.

Figure 12 – Photos taken by [redacted] last week of June 2021 showing flooded fields 24 hours after last rain event – aquifer water at the surface.

Figure 13 – Photos taken near the proposed Fanter Farms hog facility location.

CONCERNED CITIZENS OF MASON COUNTY PETITION

We oppose the current 2,400 head swine concentrated animal feeding operations (CAFO) proposal in Mason County and the extreme vertical integration of animal agriculture until our state and county regulations provide adequate protections for Illinois residents and farmers.

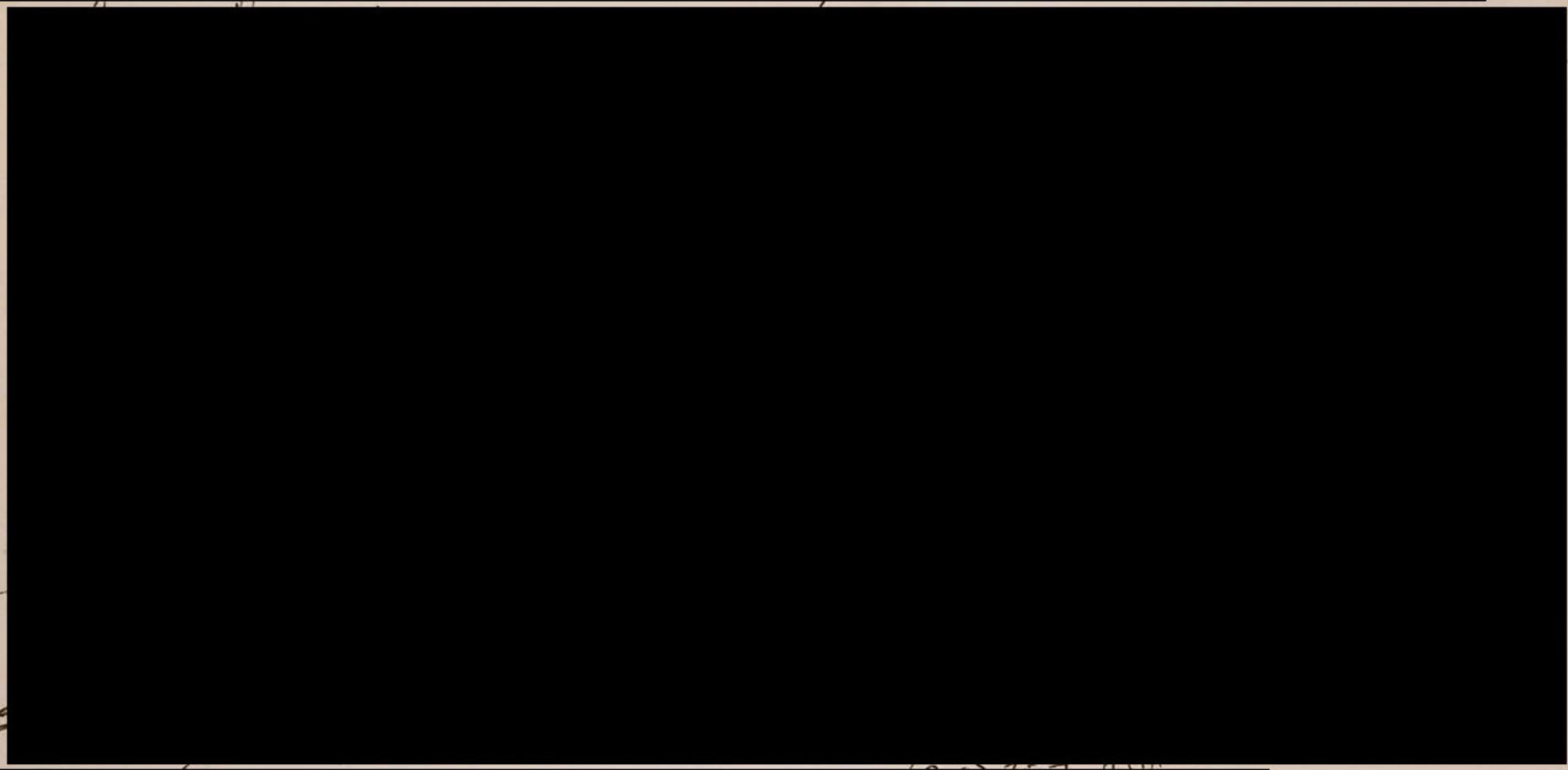
The CAFO model extracts wealth from rural communities, degrades property values, our precious natural resources, public health, and quality of life. Rather, we support a vibrant, socially responsible agricultural system that produces quality food and quality employment for our communities.

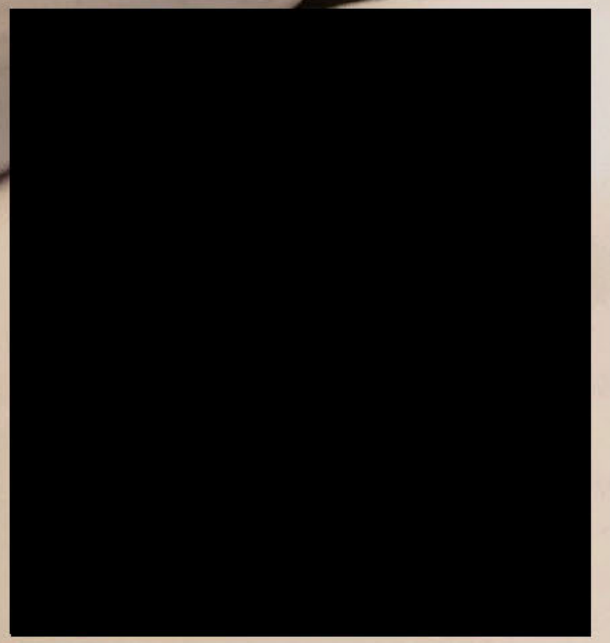
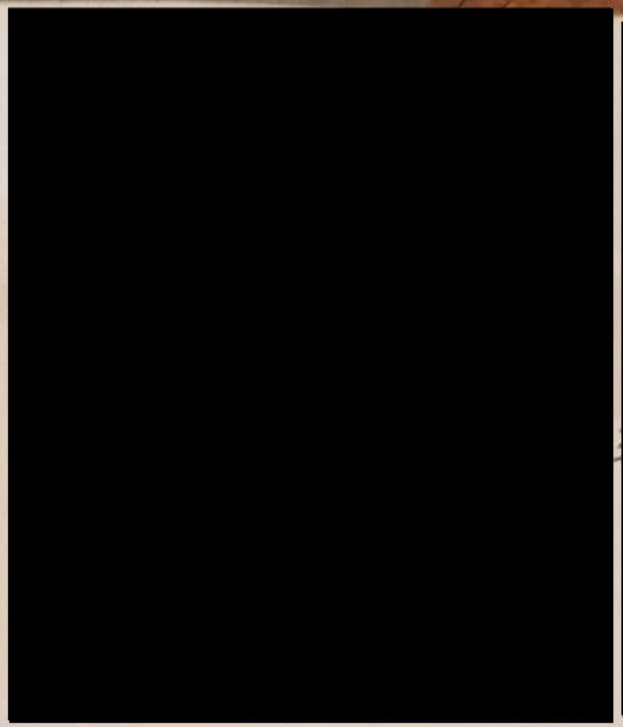
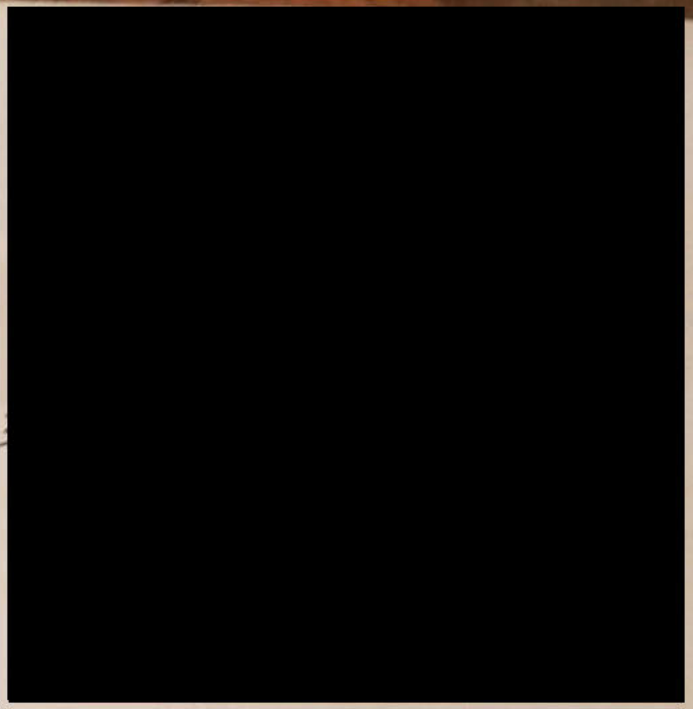
NAME	ADDRESS	PHONE	EMAIL
[redacted]	[redacted]	[redacted]	[redacted]

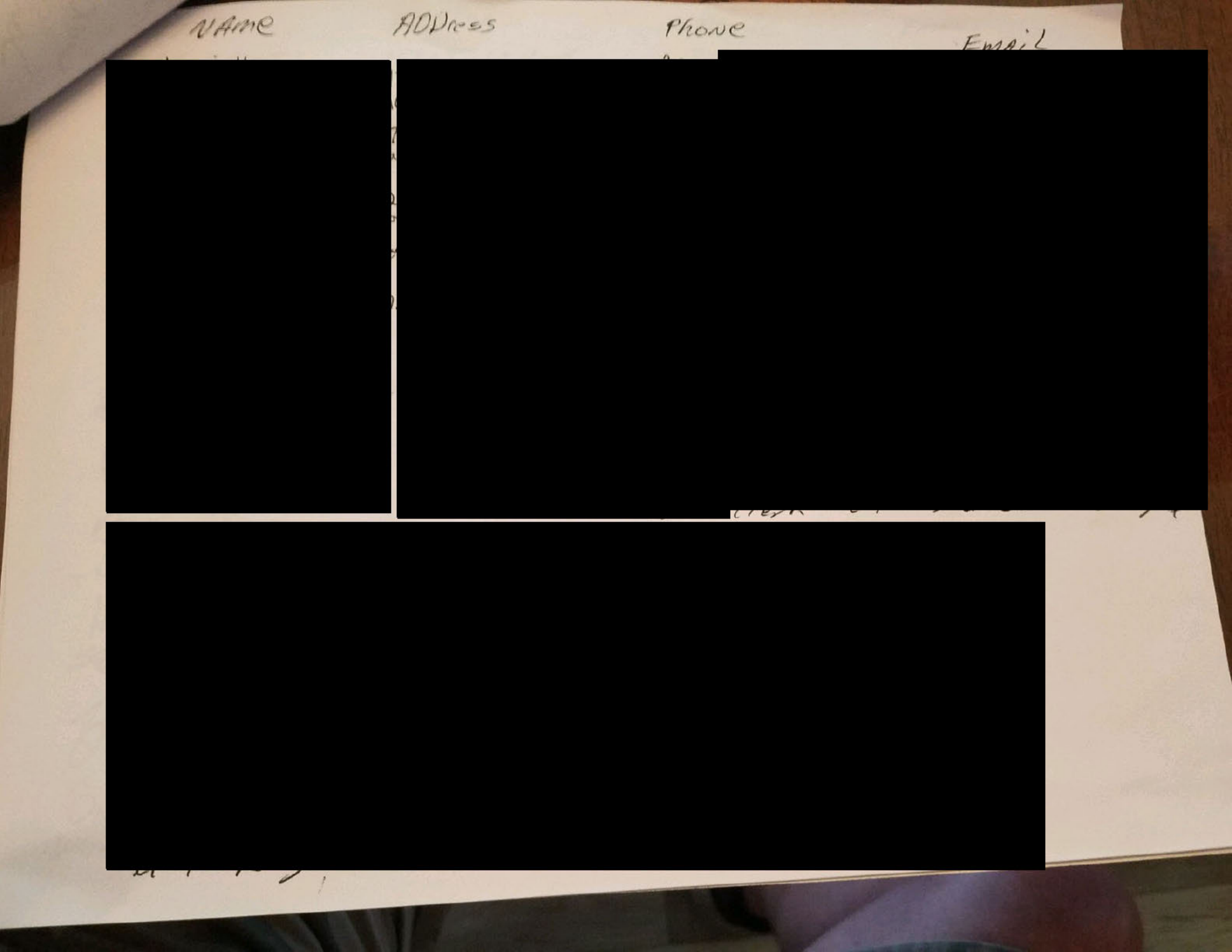
MASON COUNTY PETITION

We oppose the current 2,400 head swine concentrated animal feeding operations (CAFO) proposal in Mason County and the extreme vertical integration of animal agriculture until our state and county regulations provide adequate protections for Illinois residents and farmers. The CAFO model extracts wealth from rural communities, degrades property values, our precious natural resources, public health, and quality of life. Rather, we support a vibrant, socially responsible agricultural system that produces quality food and quality employment for our communities.

NAME	ADDRESS	PHONE	Email
[redacted]			


NAME
ADDress
Phone
Email

NAME ADDress Phone email

[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Thursday, June 24, 2021 4:10 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Re: Proposed swine feeding faculty in mason county section 3 of township 20 range 8

Follow Up Flag: Follow up
Due By: Tuesday, June 29, 2021 8:30 AM
Flag Status: Completed

I can't for the life of me see how the environmental impact of the Fanter Farm project could have been approved. How would you like a hog confinement next to your property in less than a 1/4 mile??? Much less being immediately over the Mahomet aquifer??? Somebody has either been paid off by a corporation such as Maschoffs or they are not really interested in keeping Illinois water and air quality up to a healthy standard.

[redacted]f Peterville residences in particular and Mason County concerned citizens in general.

Sent from my iPhone

> On Jun 16, 2021, at 3:43 PM, [redacted]> wrote:
>
> This is an official protest to the location of this proposed CAFO.
> 1. It's proposed site is to be located over an area where the Mahomet aquifer has in the past surfaced above ground and has the potential of any runoff to contaminate the aquifer which supplies water to thousands of people.
> 2. It's proposed site endangers those residences located within a quarter and a half mile plus there is a small community of homes just adjoining on the north. The community has been in the plat book since 1868.Some of the residences are special needs people and growing children.
> 3. There are many irrigation and livestock wells in close proximity. All of the homes rely on the Mahomet aquifer for their water supply.
> 4. Locating a CAFO near residences devalues their property. It isn't fair to site a CAFO where it's potential is to degrade and devalue existing properties.
> 5. Township roads are blacktop over sand and not designed for year around heavy traffic of transport vehicles.
> 6. There were flaws in the first request for permission to build. Only some have since been corrected.
>
> Respectfully
> [redacted]

[redacted] Sent from my iPhone

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Friday, June 25, 2021 7:32 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Fwd: Speaking of wetlands. In relation to the proposed Fanter Farms project.

Sent from my iPhone

Begin forwarded message:

From: [redacted]
Date: June 25, 2021 at 6:01:31 PM CDT
To: K[redacted]
Subject: Speaking of wetlands.

I think all of Hugh's comments are spot on and to further corroborate his comments:
Remember our home is eight tenths of a mile East of the proposed site, just on the other side of John Friend. We are on the old Hurd Lake drainage district. Before the area was drained in the 1880s it was all a lake/ swamp. There is still one place back against the edge of the woods South of the house (not accessible by vehicle other than tractor) where the water from the aquifer usually remains above the ground. The entire area was once called Hurd Lake. Randy is quite right about how near the surface this aquifer is located. The drainage ditch just east of our house leads to the Crane Creek and then to the Sangamon River and from there to the Illinois River. There is always water in the drainage ditch all year. That information should be easily verified. Our house is on top of a sand hill at the North edge of Hurd Lake and water from a sand point thirty feet down is our home water supply. Kay C.

Sent from my iPhone

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Friday, June 25, 2021 9:05 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Re: Speaking of wetlands. In relation to the proposed Fanter Farms project.

I just forwarded it to John Gehrke. K

Sent from my iPhone

On Jun 25, 2021, at 7:30 PM, K[redacted] wrote:

Sent from my iPhone

Begin forwarded message:

From: [redacted]
Date: June 25, 2021 at 6:01:31 PM CDT
To: [redacted]
Subject: Speaking of wetlands.

I think all of Hugh's comments are spot on and to further corroborate his comments: Remember our home is eight tenths of a mile East of the proposed site, just on the other side of John Friend. We are on the old Hurd Lake drainage district. Before the area was drained in the 1880s it was all a lake/ swamp. There is still one place back against the edge of the woods South of the house (not accessible by vehicle other than tractor) where the water from the aquifer usually remains above the ground. The entire area was once called Hurd Lake. Randy is quite right about how near the surface this aquifer is located. The drainage ditch just east of our house leads to the Crane Creek and then to the Sangamon River and from there to the Illinois River. There is always water in the drainage ditch all year. That information should be easily verified. Our house is on top of a sand hill at the North edge of Hurd Lake and water from a sand point thirty feet down is our home water supply. [redacted]

Sent from my iPhone

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Tuesday, June 29, 2021 10:31 AM
To: Gehrke, John - FSA, Springfield, IL
Subject: Re: [External Email]Re: Proposed swine feeding faculty in mason county section 3 of township 20 range 8

Well I wish some inept observers would come see this swampy area today although standing corn makes it a bit harder. We have had over 5" of water since Thursday and East of us where it is also blessed with the Mahomet aquifer has had up to 11" in places. I just can not understand how government officials can condone placement of CAFOs with the potential of i contaminating a water supply for so many people. It's totally irresponsible and unreasonable. But it's irresponsible on the farmers part too. If they cared about the environment they would be more careful about their farming practices. I'm not letting organizations such as Farm Bureau off of The hook by taking their share of the blame too. We owned businesses that served the farming industry for fifty years and always held meetings to try to teach our customers to be good stewards of the land. Where has that spirit gone??? Kay Curtis in Mason County

Sent from my iPhone

> On Jun 29, 2021, at 8:50 AM, Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov> wrote:
>

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
[redacted]
Tuesday, June 29, 2021 12:25 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: Re: [External Email]Re: Proposed swine feeding faculty in mason county section 3 of township 20 range 8

Yet another photo in mason county near the CAFO site. K

Sent from my iPhone

> On Jun 29, 2021, at 8:50 AM, Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov> wrote:
>
> Ms. [redacted]
>
> I apologize that I missed your message last week!
>
> The environmental review has NOT been completed or approved. The comment period is still open.
>
> Thank you.
>
> John Gehrke

> 217 331-6873
>
> -----Original Message-----
> From: [redacted]
> Sent: Thursday, June 24, 2021 4:10 PM
> To: Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov>
> Subject: [External Email]Re: Proposed swine feeding faculty in mason county section 3 of township 20 range 8
>
> [External Email]
> If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.
> Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov
>
> I can't for the life of me see how the environmental impact of the Fanter Farm project could have been approved. How would you like a hog confinement next to your property in less than a 1/4 mile??? Much less being immediately over the Mahomet aquifer??? Somebody has either been paid off by a corporation such as Maschoffs or they are not really interested in keeping Illinois water and air quality up to a healthy standard.
>
> [redacted]
> on behalf of Peterville residences in particular and Mason County concerned citizens in general.
>
> Sent from my iPhone
>
>> On Jun 16, 2021, at 3:43 PM, [redacted] > wrote:
>>
>> This is an official protest to the location of this proposed CAFO.
>> 1. It's proposed site is to be located over an area where the Mahomet aquifer has in the past surfaced above ground and has the potential of any runoff to contaminate the aquifer which supplies water to thousands of people.
>> 2. It's proposed site endangers those residences located within a quarter and a half mile plus there is a small community of homes just adjoining on the north. The community has been in the plat book since 1868.Some of the residences are special needs people and growing children.
>> 3. There are many irrigation and livestock wells in close proximity. All of the homes rely on the Mahomet aquifer for their water supply.
>> 4. Locating a CAFO near residences devalues their property. It isn't fair to site a CAFO where it's potential is to degrade and devalue existing properties.
>> 5. Township roads are blacktop over sand and not designed for year around heavy traffic of transport vehicles.
>> 6. There were flaws in the first request for permission to build. Only some have since been corrected.
>>
>> Respectfully
>> [redacted]
Sent from my iPhone
>
>
>
>
>
>
> This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and

subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Tuesday, June 29, 2021 12:17 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Near the CAFO proposed site it Mason County

Sent from my iPhone

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted] >
Sent: Tuesday, July 20, 2021 12:05 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: Re: [External Email]Re: Proposed swine feeding faculty in mason county section 3 of township 20 range 8

It gets very discouraging when we hear of other countries banning CAFOs Per the European Union report because of pollution but the United States can't even clean up their act state by state. We are just slowly but steadily destroying our planet. Read about the country of Turkey and their water contamination. Where is it all going??? Wake up America. Our little community is doing our best to protect the Mahomet aquifer in Mason County Illinois but the Farm Bureau supports anything that the farmer wants to do. The FB organization puts a lot of money into Voting for government employees??? How odd that those in government they think CAFOs are a great idea and approve every application??? Kay Curtis

Sent from my iPhone

> On Jun 29, 2021, at 12:24 PM, [redacted].com> wrote:
>
>
> <image.jpg>
> Yet another photo in mason county near the CAFO site. K
>
> Sent from my iPhone
>
>> On Jun 29, 2021, at 8:50 AM, Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov> wrote:
>>
>> [redacted]
>>
>> I apologize that I missed your message last week!
>>
>> The environmental review has NOT been completed or approved. The comment period is still open.
>>
>> Thank you.
>>
>> John Gehrke
>> 217 331-6873
>>
>> -----Original Message-----
>> From: [redacted]
>> Sent: Thursday, June 24, 2021 4:10 PM
>> To: Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov>
>> Subject: [External Email]Re: Proposed swine feeding faculty in mason
>> county section 3 of township 20 range 8
>>
>> [External Email]
>> If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.
>> Please send any concerns or suspicious messages to:

>> Spam.Abuse@usda.gov
>>
>> I can't for the life of me see how the environmental impact of the Fanter Farm project could have been approved. How would you like a hog confinement next to your property in less than a 1/4 mile??? Much less being immediately over the Mahomet aquifer??? Somebody has either been paid off by a corporation such as Maschoffs or they are not really interested in keeping Illinois water and air quality up to a healthy standard.
>>
>> [redacted]Peterville residences in particular and Mason County concerned citizens in general.
>>
>> Sent from my iPhone
>>
>>>> On Jun 16, 2021, at 3:43 PM, [redacted]> wrote:
>>>
>>> This is an official protest to the location of this proposed CAFO.
>>> 1. It's proposed site is to be located over an area where the Mahomet aquifer has in the past surfaced above ground and has the potential of any runoff to contaminate the aquifer which supplies water to thousands of people.
>>> 2. It's proposed site endangers those residences located within a quarter and a half mile plus there is a small community of homes just adjoining on the north. The community has been in the plat book since 1868.Some of the residences are special needs people and growing children.
>>> 3. There are many irrigation and livestock wells in close proximity. All of the homes rely on the Mahomet aquifer for their water supply.
>>> 4. Locating a CAFO near residences devalues their property. It isn't fair to site a CAFO where it's potential is to degrade and devalue existing properties.
>>> 5. Township roads are blacktop over sand and not designed for year around heavy traffic of transport vehicles.
>>> 6. There were flaws in the first request for permission to build. Only some have since been corrected.
>>>
>>> Respectfully
>>> [redacted]
>>>
>>> Sent from my iPhone
>>
>>
>>
>>
>>
>>
>> This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Sunday, June 27, 2021 10:32 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Fanter CAFO

[External Email]
If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Dear Mr. Gehrke,
It is with great concern that I write to you regarding the proposed Fanter hog confinement project.

As more and more of these large hog operations are inundating Illinois, rural communities are put at risk under the current regulations. These lax regulations leave the Mahomet Aquifer and the 500,000 people who rely on it so vulnerable. Pollutants in the dust and air, pollutants that threaten the water. Placing the operation so close to town? Near neighborhoods that include many people with health issues? The flooding, the aquifer's high water table? All of these are terribly important, life changing issues.

It seems it's not a case of IF a hog operation moves into a rural community but WHEN. This same issue will come before Township and county boards again and again. Transparency and closing the loopholes in these regulations is paramount.

I thank you for your time, Mr. Gehrke and for your consideration in this very important matter.

Sincerely,
[redacted]

Sent from my iPhone

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 30, 2021 8:06 AM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]

Dear Mr, Gehrke, I am requesting that the proposed hog confinement project in Mason County be denied. The sandy environment lends itself to a greater potential risk of run-off of pollutants & deterioration of air quality to residents. Thank you for your consideration.

From: [redacted]
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Swine Installment
Date: Wednesday, June 30, 2021 10:26:45 AM

I'm writing to you today with some grave concerns about the proposed swine processing installment that is supposedly going into Mason County near Havana, IL.

I find it unbelievably difficult to understand how a plant like this would even be considered for placement on top of the Mahomet Aquifer, a source of drinking water for the county via thousands of sand point wells. As you know, aquifer water moves underground, which potentially would carry a plume of pollution from any location. In this case, the thought is to place an enormous hog processing installation on top of a sensitive water source in the path of an entire county's population including irrigation wells. I just cannot understand how this is a reasonable suggestion at all. Is there no other location such a plant could be placed that would be in a less sensitive area?

Have any studies been done on the wildlife that live in this area? What about the threatened Illinois Chorus Frog? Can they survive a large scale contamination of their habitat? What is the mitigation plan for contamination into the water and earth under such an installment? Has the applicant provided such an action plan? How much experience does the applicant have with installing such a large operation?

What is the plan for payment to the population that will have to now live with the lowered property values and the scent of swine contaminating the air? There is absolutely no way to provide a scent free swine installment in such a way as the applicant has proposed. How do you provide compensation for a contaminated well? Plummeting property values, and ruining the population's ability to enjoy being outside would also require compensation.

Haven't we learned lessons already from Emiquon and what it requires to clean up after a large scale cattle operation? I cannot understand why there aren't other less invasive locations that would be more appropriate and in a less sensitive area that would be less damaging.

Please take into consideration these thoughts.

[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 30, 2021 4:03 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Proposed Swine Feeding Facility Draft Environmental Assessment

Hi John,

I am writing this to comment on the proposed swine feeding facility over the Mahomet Aquifer.

Never should any confinement facility be allowed to be placed around a source of water such as this.

When the confinement next to my own property was being permitted a gentleman stopped by and told my husband and I how sorry he was that this was happening to my property. He went on to say that the feces, urine and chemicals would eat into the holding area causing fissures and seep into my pond within 2 years. He had worked on many repairing them throughout several states and I felt that he was a knowledgeable source of information (and still do).

These should not ever be permitted without the neighboring body full consent for at least a 5 mile radius. EVER.

Thank you for your time.

[redacted]

From: [redacted]
To: Gehrke, John - FSA, Springfield, IL; Karen Hudson; kathy martin; Doc27j@yahoo.com; Daniel Barker; randy burgett; robin johnson
Subject: [External Email]Standing surface water runoff
Date: Monday, July 12, 2021 8:42:29 PM

Mr. Gehrke,
Attached are a couple photos of the surface water runoff that is at the intersection of CR1100N and Peterville Rd.
There is the standing water you see at the intersection and all along both sides of the roadway all the way to and past the Fanter CAFO site in Mason county which is located LESS than 1000 feet down that road.
Thank you for your time, [redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 30, 2021 8:08 PM
To: Gehrke, John - FSA, Springfield, IL; [redacted]
Subject: [External Email]CAFO proposed in Mason County by Fanter Farms

Comments of [redacted] to the Environmental Assessment of Fanter Farms CAFO Proposal

[redacted]com
[redacted]

M[redacted] I am Hispanic and reside within a quarter mile of this proposed 2400 head hog CAFO. I can state without a doubt that I am vehemently opposed to this project primarily for its close proximity to our existing residence and all the devastating effects that can and will affect my family and the local residences that live within the impact zone of this CAFO. This as well as the catastrophic impact this Hog CAFO will have on the natural resources and the environment in this area.

We, along with 4 other families live within 1/4 of a mile of this site and nearly 20 residences are within 1/2 mile of this CAFO site. Our community will be directly and adversely impacted by the waste, toxic emissions, particulates from this CAFO. We are especially concerned about contamination of our shallow wells which serve as our only drinking water source for the families that currently reside here.

Granted that these CAFOs claim to have made some strides in waste management, odor, and leakage over the years, but they haven't done enough to protect the health and properties of those who are forced to reside near them. The mounting research shows public health, property values are truly affected- there is no question about it anymore. The "sound science" is in and piling up that this industry is under regulated and controlled by corporate interests even at the local level.

After conferring with people in the construction industry concerning the materials used in today's construction, this building along with all the safeguards that are proposed to be built into it will eventually fail. As far as the leakage and overflow, just look at the aftermath of the rain deluge that we have had this past week. We are providing photos of our routine saturation and flooding in this high aquifer area. There is storm water flooded directly in front of this Fanter CAFO site and all along the Northern boundary of the site!

Our community is well aware of what that water runoff could contain. We are concerned about where all the drug resistant pathogens will end up. Directly into our shallow wells and the aquifer that is the main supply of drinking water for a very large proportion of the population of East Central Illinois.

Contrary to the EA comments on air, the emissions (particulates, pathogens, toxic gases, volatile organic compounds, and more) from ventilation fans and manure application from this site will affect our community on all sides depending on the weather of the day.

The generation and storing of the massive amounts of untreated urine and feces Into concrete holding pits is a risk we should not be subjected to as history has shown pits will start deteriorating from day one.

Then after addressing all those day to day issues, what about the carcesses that will be generated from this hog CAFO. Some of these hog CAFOs have reportedly generated over 200,000 pounds of dead pigs annually. Where will they go as far as rendering them safe from becoming hazardous or will they just be trenched into the local farmland to contaminate more water and land. So you have urine, manure, and mortalities to handle on a daily basis that Fanter Farms is going to be responsible for. Neighbors of the same size Maschoff swine facility in Peoria County have "dead odor" from the composting pits so strong they can smell it inside their home. And one the nearest neighbors directly to the East and funded their home and moved away due to the stenches. The home lingered on the market for many months and finally sold for less than it was worth according to neighbors in Peoria county.

So with all the concerns that are directly impacted by this CAFO, then we come to the most important negative impact that concerns the local citizens. Water contamination and air quality.

Besides all the direct contamination from the pathogens contained in the urine, manure, and carcesses, neighbors still must deal with the microorganisms that become airborne from the dust generated by these hogs.

The added nightmare to all this is that there are 10 children that live within this impact zone and 8 elderly individuals that suffer from respiratory issues that will be breathing in these gases, particulates, and microorganisms that this facility will produce.

There are farmers here in our area that have about 15-20 steers that live over 1/2 mile away and we can still smell them and no one objects to those - but 2,400 pigs in very close proximity to 20 families!

Granted that this is an agrarian county and Mason County is a livestock haven which no one is objecting to. The main objection is the LOCATION! This was done with total disregard to the neighbors and people that live right next to the individuals who are proposing this without any consultations, considerations, or warnings...and when asked why they were not consulted - we were told that "it was none of our business"!

This is totally wrong on so many levels with the most glaring of which is LOCATION!!!!
There are so many locations that are farther away from any residences that this CAFO can be placed on that are not near children or elderly people Not right next to 5 houses!

One can drive around Central Illinois and pass other hog CAFOs that are located far away from dwellings that are hardly noticeable and are run by very reputable and responsible farmers.
That is not the case with this Fanter Farm proposal.

Thank You for your time and consideration.
[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 30, 2021 11:59 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Comment Regarding Fanter Farms, Mason County, FSA Loan Application
Attachments: Fanter Farms FSA Loan Environmental and Social Concerns Comment.pdf

Please see my attached letter as a comment regarding the proposed FSA Beginner Farmer Loan for the Fanter Farms, Mason County, project. I ask that my letter be considered and part of the file for this.

Sincerely,
[redacted]

June 30, 2021

Mr. John Gerhke

Chief, Farm Loan Programs

USDA Farm Service Administration

3500 Wabash Ave.

Springfield, IL 62711-8287

Sent by email to: john.gerke@usda.gov

REGARDING: Fanter Farms, Mason County, Environmental and Social Concerns

Dear Mr. Gerhke,

The site of the Fanter Farms, Mason County, which has applied for a Beginner Farmer Loan from the Farm Service Administration, is in a location that is known to have flooding. Most importantly the location is over the Mahomet Aquifer, which is unconfined in this region. This unconfined area of the Mahomet Aquifer means any surface run-off, spills during loading or unloading of manure, manure run-off from field applications, run-off from dead hog composting or other typical confined animal feeding operations events, are a direct hazard for groundwater contamination and a clear and present danger to the Mahomet Aquifer.

While confined animal feeding operations state they will not have or do not anticipate having any types of run off, accidents do happen and run-off occurs. The field application of manure in this area is also a concern because of the current rapid Illinois climate change with more sudden and severe rains. While the Fanter Farms proposal is currently a 2,400 swine operation, many of these sites often increase their size within a few years of start-up. Illinois regulations do not provide adequate controls and protections once these animal feeding operations are established or increase in size.

While your office may not be concerned with the lack of adequate Illinois regulations, inspections and enforcement of these animal industrial locations, your office must consider the site specifics and environmental effects.

Fanter Farms is a clear and present danger to the Mahomet Aquifer and this proposal should either have no action or be denied. Estimates are that the Mahomet Aquifer is the sole source for regional potable water for over 900,000 people with withdrawal of an estimated 80 million gallons of water a day for public use. The Illinois State Water Survey clearly states on its webpage regarding the Mahomet Aquifer that, “The potential for agricultural chemical and nutrient contamination of groundwater is also of concern in the sandy areas of Mason and Tazewell Counties.” Source: https://www.isws.illinois.edu/groundwater-science/gs-archive/mahomet-aquifer

Mason County should not have the added risks to its public water resources that are presented by the Fanter Farms project. The potential of Mahomet Aquifer contamination is too high. The Plainfield soil of this site is described by the USDA as having rapid or very rapid permeability and is excessively drained. Pollution would be draining to the aquifer before hog waste leaking from the manure storage under the containment building would be detected or before containment of any other leaks or spills could be put in place.

It is only about six miles from the proposed project area to Mantanzas Lake and the Illinois River. Anderson Lake State Fish and Wildlife Area is just down river. The Mahomet Aquifer is the underlying water resource for the regional water flow and deserves every protection from contamination. Animal feeding operations present health risks to water and air quality. Antibiotics in the manure, E. coli, bacteria, and other health hazards are prevalent in swine wastes.

Gases from this confined hog production will likely include hydrogen sulfide, ammonia, methane and carbon dioxide. There are several homes near the Fanter Farms proposed site and one directly downwind from the prevailing south westerly winds that are predominant to the area. These homes and value will be adversely impacted if this project is constructed.

Years ago, I attended numerous public meetings about the Mahomet Aquifer. A distinct comment made at a meeting was, 'you can't just whistle pollution back once it's happened.' When the aquifer was given sole source designation, many people thought full protections from pollution risks would be assured. That clearly is not the case. It is more than upsetting to see funding support for a project that could at some point easily pollute the Mahomet Aquifer. It is not necessary for the Fanter Farms to build in this location, as certainly locations away from the Mahomet Aquifer unconfined area exist. The USDA loans program should not be accelerating pollution risks to a sole source aquifer.

This letter is to urge that the loan for Fanter Farms, Mason County, either have no action or be denied. This project should not be built over the unconfined Mahomet Aquifer within just several miles of Illinois River lakes and wildlife areas. There is also a clear lack of adequate assessment of the flooding history of the area. This project will present adverse impacts to air quality for neighbors and concerns for property values. It could put the county, the state and potentially the federal government at risk to future costs that could be necessary due to aquifer contamination.

Sincerely,

Mr Gehrke,

I want to express my vehement opposition to your department funding the Fanter cafo.

As the closest, non-relative resident to this confined animal feeding operation, I implore you, to further study the impact on the surrounding residents before funding this project with our tax dollars.

While this project may meet "minimum" requirements set forth by the LMFA it certainly was not sited with the minimum negative impact to our small community in mind. There are many more suitable locations available in this county including an existing site for sale that would have less impact on people, the environment and local infrastructure.

The only source of potable water in our area is from residential wells, having the facility in such close proximity and at a higher elevation than my well head is very concerning. My property is located on the Northwest corner of Peterville Rd and 1100N , there is water standing on my property now from normal drainage along 1100N leading up to the Fanter Site. The road had to be raised 1 1/2 feet a few years ago, because it flooded after any moderately heavy rain. There are also abandoned wells down range of the site.

I also have concerns about the following, which I don't believe, were adequately addressed in your Draft EA

3.1.10
Noise Effects on noise were eliminated from detailed analysis. Effects on noise were determined not to be significant, because the project 1) will not create noise that will interfere with communication, 2) is intense enough to damage hearing, or 3) is otherwise annoying. There are no state or local noise ordinances with which the operation would not comply. The increase in noise level during construction would be temporary, resulting from operation of heavy equipment during normal hours. Construction of a facility of this size would typically take six months from start to finish. There are no residences within one mile of the project site that could be impacted by excessive noise.

In Regards to item 3) Cafos are a 24/7 operation, a former Maschoff facility in the county that I'm familiar with, often loaded and delivered hogs in the very early morning hours. I believe "jake brakes" on livestock haulers rattling pictures on my walls at 2am would be considered "otherwise annoying" not to mention the increased commercial traffic from 80,000 lb feed trucks, propane deliveries etc.

3.2.1 Sole Source Aquifers The Safe Drinking Water Act gives EPA authority to designate all or part of an aquifer as a "sole source" if contamination of the aquifer would create a significant hazard to public health and there are no physically available or

economically feasible alternative sources of drinking water to serve the population that relies on the aquifer. The designation authorizes EPA review of projects that receive Federal financial assistance to assess potential for contamination of the aquifer system that would create a significant hazard to public health. EPA defines a sole source aquifer as one where: • The aquifer supplies at least 50 percent of the drinking water for its service area, and • There are no reasonably available alternative drinking water sources should the aquifer become contaminated. The proposed barn and manure application sites lie within the Mahomet Sole Source Aquifer (the aquifer) recharge zone. The Mahomet Aquifer system is an underground layer of water-bearing sand and gravel that fills a wide bedrock valley in an area that includes 14 east-central Illinois counties, including Mason County. The Aquifer provides about 58 million gallons of drinking water each day for 120 public water systems and thousands of rural wells that serve about a half million people in Illinois.

Does this site require a waste management plan?, or was it specified to be just under the threshold to require one?

Given the lack of depth to the Mahomet Aquifer are there restrictions in place for dealing with swine mortality?

Pigs slowly decompose until they are unrecognizable, generally after a few years. One concern is that burial can have negative environmental impacts if the sites aren't selected carefully. In particular, depth to groundwater or sandy/gravely soils where leachate transport to groundwater is more likely.

3.2.3
Impacts of the No Action If the Proposed Action is not implemented, then the existing conditions of the Mahomet Aquifer at the site would continue and no impacts would occur.

This would be the ideal outcome for all humans in the area!

3.2.7 Air Quality The proposed farm would not be required to obtain an air permit in accordance with the EPA permitting authority, 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. The facility as proposed meets the setback requirements of the Livestock Management Facilities Act. According to the IL Department of Agriculture Notice of Intent to Construct, there are 12 landowners within the setback limits. There are no residences within the occupied residential setback of 1,320 feet and there are three residences within the populated area setback of 2,640 feet from the proposed building. The predominant winds in Central Illinois are south – southwest. There are trees located to the south as a partial buffer. The setback requirements of the Livestock Management Facilities Act, administered by the Illinois Department of Agriculture, are legal

requirements put in place to protect those inhabitants, commercial businesses, and places of congregation within a certain distance of livestock facilities.

The setbacks are minimum requirements, not the most morally or socially responsible ones. There are several elderly , disabled veterans and breathing compromised people living mere feet outside the setback circle.

3.2.8

Impacts of the Proposed Action 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. 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 the proposed construction related impacts would have a significant or long-term adverse impact to surrounding air quality. Odor would be controlled through the management of the barn's ventilation systems, as required by the integrators for livestock health. Exhaust fans are used to capture a portion of the particulate to reduce emissions and also dilution of odors caused through the mixing of ambient air and is a function of distance, topography, and meteorological conditions. Industry best practices are used to reduce effects to air quality, including the elimination of storage lagoons, and injecting waste directly into the soil to minimize exposure to the air..

"Odor would be controlled through the management of the barn's ventilation systems, as required by the integrators for livestock health."

The above quote seems to contradict the research I have done. If the VOC's , particulates, and asphyxiant gasses are harmful for the livestock, are they no longer harmful to me when they are expelled through exhaust fans?

What government oversight is in place to ensure that "industry best practices" are followed?

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Friday, July 2, 2021 8:43 AM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Mahomet Aquifer and Fanter Farms

[External Email]
If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Mr. Gehrke,
Please protect the Mahomet aquifer from contamination from confined hog farms. A full biological and site area ground assessment should be required before the project starts.

The aquifer needs to be protected from hog farm run off so that residents and wild life have safe water.

Thank you,
[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Tuesday, June 29, 2021 9:24 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]This Little Piggy
Attachments: EA11C418-5503-42F1-A519-C103C656D5BA.jpeg

Follow Up Flag: Follow up
Due By: Friday, July 2, 2021 9:00 AM
Flag Status: Completed

I'm writing today concerning the pig containment installment that has been proposed for Mason County outside Havana, IL. While I believe your time is valuable, I believe my thoughts are as well. I will be as concise as possible. Regarding such an installment, I wish you to consider a couple of extremely important points. This place is planned to sit right on the Mahomet Aquifer system (included photo/map) which waters both crops and people within its bounds.

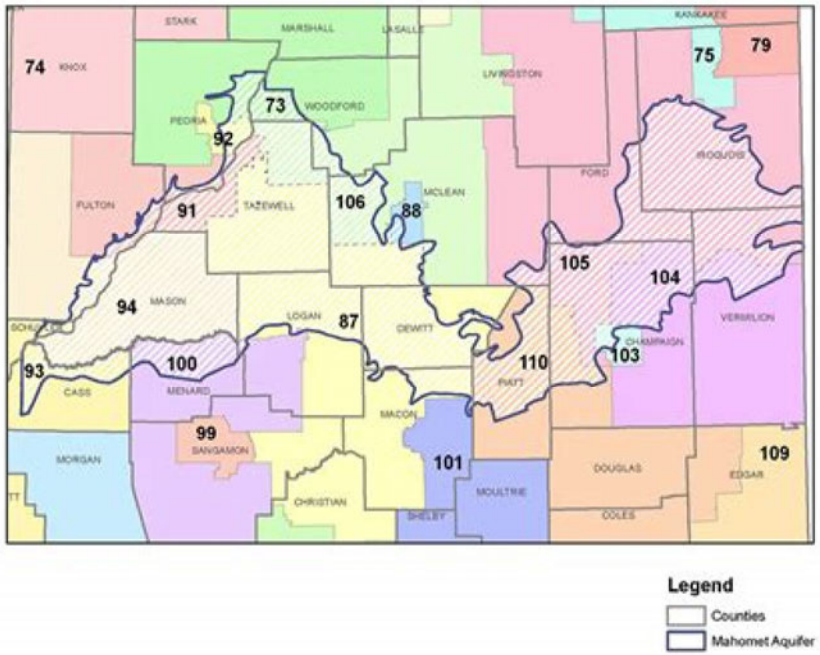
The Nature Conservancy has worked extremely hard in nearby Havana at Emiquon to restore a once damaged wetlands due to cattle over usage for many years. It feels counterproductive to use all those dollars to restore an area poorly suited for cattle back to its original state only to turn around and allow a project approved by a federal agency just down the road that will certainly threaten a rare water resource. I am far certain there are many areas in our country that would pay an exorbitant fee for such a valuable resource. Have you considered the irrigation wells that draw from this aquifer? Would you eat crops that were watered from under a pig farm? How are families supposed to feel safe drawing water to feed their children from a place that may or may not be leaching contaminants into the ground? Where will all the manure be housed? What is the emergency plan for when that leaks? What about the odor of such a facility? How is that to be remedied?

Next I would like you to consider the applicant. What are his past business dealings? How much experience does he have with hosting such an installment on such a sensitive water source? How does the community feel he will treat the land and the people? Certainly these kinds of questions should have carefully considered answers. Is he able to produce a valid business plan and environmental awareness plan? What is his motivation for such a large and potentially catastrophic installment? Have you interviewed all of the family members? Are you certain they feel he would be a good candidate for such a confinement area? This is not a project to be taken lightly. What is his financial backing? Do the people living adjacent have confidence that this will be an asset? I'm extremely familiar with land usage and how it's important to look impartially at each project. I cannot help but think this is environmentally a terrible decision. While it 'has to go somewhere', smack on top of a sensitive water aquifer full of sand-point wells and crops we eat watered by such, feels like a terribly poor choice.

When considering a project this large, it is necessary to consider ALL aspects of the surrounding and underlying areas, not just the immediate location. Please consider the points I've raised and stop for a moment and realize that perhaps this project would be better placed in a less sensitive, more conducive area to large scale pig production. Just because it's 'on farmland' doesn't mean it shouldn't be carefully considered from all viewpoints. Thanks for your time.

[redacted]

Illinois House Districts



McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Tuesday, July 13, 2021 10:28 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Protect the water aquifer

Dear John Gehrke,

A large, 2480 hog Confined Animal Feeding Operation (CAFO) is being planned in the sandy reaches of western Mason County, between Havana and Kilbourne. The Mahomet Aquifer underlies this area and is unconfined, meaning the aquifer is not far below the surface and is overlain by soils that easily and quickly allow surface water to reach the aquifer.

This CAFO is requesting federal funding which must be approved by the Springfield Office of the Farm Service Administration (FSA). An Environmental Assessment
must be done by the FSA and public comments can be made. The proposed Fanter Farms swine project puts the Mahomet Aquifer at clear and present danger. Run-off from hog farms includes hog waste containing antibiotics and contaminants. Run-off can also occur from hog compost piles where dead animals are placed for disposal. This area is thought to have threatened and endangered state animals and plants and frequently floods due to the high water table.

I request that this project have a full biological and site area ground assessment to evaluate the long-term impacts. Please deny this project due to the clear risks of Mahomet Aquifer contamination.

A mega dairy near me polluted our creek with leachate and discontinued building rather than pay fines and prove that it would not pollute again. Water is essential to surrounding farms and communities. Protect this precious commodity, especially during climate change causing drought!
You can check the 5 year long legal battle with local residents and communities at http://www.stopthemegadairy.org/.

Thank you for your time,
[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted] [redacted] 10:26 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: RE: [External Email]Illegally sited proposed Fanter CAFO, Peterville/K ilbourne, Illinois

Page three of the document found on the following link confirms official confirmation of the endangered Illinois chorus frog being verified in the exact location of the illegally sited Fanter CAFO. Please make sure it is added to the environmental review file. I assume the law will be followed and no excavations permitted on this rare habitat.

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww2.illinois.gov%2Fsites%2Fnaturalheritage%2Fspeciesconservation%2FSpeciesGuidance%2FDocuments%2FICF%2520species%2520guidance_final.pdf&data=04%7C01%7C%7C2a97ae57782a4ed42b0c08d95d416292%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637643359610677509%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=6CZpy6JpA0cm9ITD9ZL3nxh9sBZ%2FKP50X98RGAmIGkM%3D&reserved=0

[redacted]

---------- Original Message ----------
From: "Gehrke, John - FSA, Springfield, IL" <john.gehrke@usda.gov>
To: [redacted] CAFO, Peterville/Kilbourne, Illinois
Date: Tue, 10 Aug 2021 21:16:49 +0000

Mr. [redacted]

We acknowledge receipt of this email and your voice mail from today. I am unable to give you a specific timeframe for completion of the site specific environmental assessment; we are still waiting on a formal response from the U.S. Environmental Protection Agency.

It was not clear how an obituary is relevant. All site specific comments received for this proposal will be incorporated into the final assessment.

Thank you,

John Gehrke
217 331-6873

-----Original Message-----
From: [redacted] >
Sent: Wednesday, August 4, 2021 11:56 AM
To: Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov>
Cc: democratnewspaper@gmail.com
Subject: [External Email]Illegally sited proposed Fanter CAFO, Peterville/Kilbourne, Illinois

[External Email]
If this message comes from an unexpected sender or references a vague/unexpected topic; Use caution before clicking links or opening attachments.

Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Is the environmental review on the loan for this hog confinement still in process? The following information is relevant.

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hurleyfh.com%2Fobituaries%2FJohn-Friend%2F%23!%2FObituary&data=04%7C01%7C%7C2a97ae57782a4ed42b0c08d95d416292%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637643359610677509%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=joMUUznDHf1azkktQFgyh0RHaTOIKcZ%2BnOdMpxz1BVU%3D&reserved=0

I was told that he was found laying in the grass near his home, which is slightly over a quarter mile east of the Fanter CAFO Site. Apparently he'd been there about a week. He is the uncle of Amy Beck Fanter, a co-applicant on the CAFO. He told me he wasn't told about the CAFO until "very recently" when I talked with him in June. He said he'd lived in his small home there for about five years, and assumed he would have to move. His home was falsely claimed to be temporary and mobile in the CAFO application papers, his well was ignored, and it was claimed that he did not received mail there, though it wasn't mentioned that his mailbox had been repeatedly vandalized. The last time I was there, a substantial mailbox post was still there. He wasn't able to drive and he told me it was just too much trouble to try to keep the mailbox in tact. I don't know his cause of death. He did seem to be despondent over being forced out of his home by the CAFO.

Attached is a screen shot of 14 Maschhoff owned CAFO's, 1.5 to 2 miles SE of Bath. This have large open sewage lagoons, which you can see in the screen shot.

The second is a Maschhoff farrowing operation about a mile and a half west and slightly south of Fairview Methodist Church.

The third is a Maschhoff owned CAFO related facility that I know little about. I was told that it is currently inactive, but haven't been there to see.

Third fourth screen shot is a Maschhoff owned CAFO on 500 N at about 1400 E with seven more standard sized hog barns and open sewage lagoons.

I'm not able to estimate the hog population of the farrowing operation. The 21 hog confinement buildings in the first two screen shots appear to be standard 2499 hog size, which yields an estimated hog population of about 55,000 Mashhoff owned hogs in Maschhoff owned facilities. Adding the Brian Gathman and Andy Gathman facilities which are filled with Maschhoff owned hogs, that brings known Maschhoff owned hog population in Mason County, not including piglets and sows in the farrowing operation, to about 57,000 Maschhoff owned hogs. All of these facilities are on "uncontained" portions of the Mahomet Aquifer. There are also about 2499 Tri Oak (another hog raising oligarch) owned hogs in the Chris/Jeremy Gathman CAFO, which is on the corner of 1500 N and 2600 E. I think 60,000 hogs over uncontained portions of the aquifer in Mason County is a conservative estimate. There is another farrowing operation near the SW corner of Kilbourne, and a few smaller farrowing and or feeding operations throughout the county.

[redacted]

subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 16, 2021 5:09 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL
Attachments: Peterville CAFO IL AG.pdf; Peterville IDA 2 (1).pdf; doc00782420210521160920 (3).pdf

Dear Mr. Gehrke:

I am very pleased to learn that you are reviewing this horribly sited facility. As explained in my attached letter to the Illinois Attorney General's Office, the site is less than a half mile of Peterville, Illinois, a small town platted in 1868. Their nearly fifty residents included three elderly people on oxygen and eight small children with one on the way. Peterville is on sandy soil with the Mahomet Aquifer so near the surface that the surface often rises above ground level. All Peterville homes are on shallow sand point wells, and the family of one of the Fanter applicants owns the farmland that adjoins Peterville to the west. Neither of the applicants grew up on farms and neither have an ag education. Even well applied manure would be a major public health hazard so near these homes. There was a major aquifer flood in that area in 1993 that left roads impassable. CR 1100 N adjoins the CAFO site and passes over a very wet spot near the top of the aquifer between the CFO and IL 97. This would cause major road damage in wet weather. As I'm sure you're aware, the Mahomet Aquifer is the largest in Illinois and directly provides drinking water to about a half million residents. The aquifer tops off into the Illinois River a few miles west of Peterville. Excess phosphate from hog manure is a major problem in the Illinois/Mississippi River Systems and well out into the Gulf of Mexico.

I have also attached a letter to the Illinois Department of Agriculture. They seem to recognize that their own siting rule is in violation of State Law and have promised to contact me when their attorney's have reviewed the situation. There is also a PDF of a petition of over a hundred people who live in and near Peterville who object to the CAFO and a copy of original Peterville May 20 Census cards, most of which are signed by representatives of households.

I would be very pleased to provide any additional information that might be helpful to your investigation.

I am a Mason County Board member and on the Mason County Board's Agriculture Committee. The Illinois Livestock Facilities Management Act is very lax and needs to be more restrictive. Illinois Department of Agriculture and Illinois EPA both seem to lack the resources to do a decent job of complying even with existing siting regulations. The Fanter CAFO at Peterville never should have been approved.

[redacted]

[redacted]

June 8, 2021

Re: Illinois Department of Agriculture CAFO siting rule that violation of State Law

Mr. Kwame Raoul
Illinois Attorney General
100 W. Randolph St.
Chicago, IL 60601

Dear Sirs;

A large concentrated animal feeding operation (CAFO) has been approved in violation of The Illinois Livestock Facilities Management Act, which prohibits a 2499 animal hog confinement from being sited within a half mile of a populated area. It states under setbacks, "(3) For a livestock management facility or waste handling facility serving 50 or greater but less than 1,000 animal units, the minimum setback distance shall be ¼ mile from the nearest occupied residence and ½ mile from the nearest populated area."
(https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1720&ChapterID=41)

Despite the fact that this law is indecently lax and dangerous to public health, the Illinois Department of Agriculture has internal rules that are in violation of even the of the above cited regulation's definition of a populated area. The Act states, "(510 ILCS 77/ 10.60) Populated area. "Populated Area" means any area in which 10 inhabited non farm residences are located" In contrast with the Act's prohibition of a CAFO of this size within a half mile of a populated area, the Illinois Department of Agriculture's internal rule add that all ten of the houses within a populated area must be within a half mile of the CAFO to be protected. The clause in violation of the Act is found on the top of page 7 in the following Illinois Department of Agriculture document:
https://www2.illinois.gov/sites/agr/Animals/LivestockManagement/Documents/lmfareg.pdf#search=rules%20animal%20feeding%20operation%20siting

Over one hundred neighbors have protested this CAFO, including an overwhelming majority of households in Peterville, a 150 year old small community of about fifty residents. It is less than a half mile from the referenced CAFO to Peterville. Residents include two elderly people on oxygen, eight small children, and one child on the way. Property owned by one of the applicant's family is directly upwind of Peterville and is the presumed site to receive manure, further exposing Peterville to odors, gases, and pathogens. Most Peterville homes have shallow wells into the top of the Mahamot Aquifer. The top of the aquifer is close to and sometimes above ground level, making water pollution probable. One resident, James Farwell, was told by a prominent local realtor that his property value would fall by 50% if this illegally sited CAFO is built. Like many in Peterville, most of his family's capital is tied up in their home.

The problem outlined in this letter is common to most Illinois counties. I hope you will support the wellbeing of Illinois residents and require that the Illinois Department of Agriculture follow the half mile setback requirement and end their illegal policy of only applying this requirement when ten houses are within a half mile of a CAFO.

Extensive information and documentation is available on problems specific to Peterville. Please contact me if more information would be helpful.

Sincerely,

[redacted]

[redacted]

Attn: Mr. Brad A. Beaver
Bureau of Environmental Programs
Illinois Department of Agriculture
Illinois State Fairground
P. O. Box 19281
Springfield, IL 62794-9281

Re: Illegally sited Franter Farms CAFO
Peterville, Illinois

Dear Sirs:

As you are aware, siting regulations for CAFOs in Illinois require a set back of a half mile from any populated area. The legislation defines a populated as ten houses. Set back maps accompanying the above referenced CAFO clearly indicate the Gino Santanna Residence and the James Farwell Residence are less than a half mile from the CAFO. Both are within the contiguous populated area of Peterville, Illinois. An overwhelming majority of Peterville residents confirmed that these two residences are indeed within Peterville. Additions to the 1868 Peterville Plat also indicate that other parts of the Peterville as now platted are within a half mile of the referenced proposed CAFO.

Peterville was platted in 1868 and has been a contiguous populated area ever since, having grown outside the original 1868 plat. The settlement has had a school, church, blacksmith shop, store, dance hall, and other established social, cultural, and economic institutions. Though some outliers also consider themselves to be part of Peterville, those within number 41 people. They mostly live in well kept middle classes. Three residents are on oxygen and three others report respiratory problems. 8 Peterville residents are age 8 or younger and one Peterville resident is pregnant with another child. James Farwell reported that a prominent local realtor, Darrell Sarff, estimated that his home value would drop in half if the CAFO is allowed to be built. He said the home value represents most of his family's total capital. This is likely true for a number of other residents.

The attached screenshot of a map is found at:
https://www.acrevalue.com/map/IL/?lat=40.224334&lng=-89.995305&zoom=15
displays a dark area of small contiguous parcels that comprise Peterville as it now exists. The map itself labels Peterville on CR 1100 N and touches the properties of James Farwell and Gino Santanna, both of whom are on CAFO application maps as clearly within a half mile of the proposed CAFO.

The Peterville Census is composed of short questionnaires, nearly all of which were signed and witnessed. These original documents are available for your inspection.

In light of the fact that the Fanter Farms CAFO falls within less than a half mile of a populated place as defined in siting regulations, I hereby request that their application be denied.

Sincerely,

[redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

N/

Number of residents in the household _____

Number of residents with respiratory problems _____

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation _____

Do you consider your residence to be part of Peterville? (yes or no) no

Do you consider the James Farwell residence to be in Peterville? (yes/no)_____

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no)_____

Signed _____

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems DA

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation YES

Do you consider your residence to be part of Peterville? (yes or no) YES

Do you consider the James Farwell residence to be in Peterville? (yes/no) YES

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) YES

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems 2

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation YES

Do you consider your residence to be part of Peterville? (yes or no) YES

Do you consider the James Farwell residence to be in Peterville? (yes/no) YES

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) YES

Signed [redacted]

[redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]vana

Number of residents in the household 2

Number of residents with respiratory problems 0

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation NO

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) Yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) NO

[redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 4

Number of residents with respiratory problems 2

Number of children under the age of 8 years 1 8 yr old

Do you oppose the Fanter Concentrated Animal Feeding Operation YES!!!

Do you consider your residence to be part of Peterville? (yes or no) YES

Do you consider the James Farwell residence to be in Peterville? (yes/no) YES

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) YES

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems 0

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation yes

Do you consider your residence to be part of Peterville? (yes or (no))

Do you consider the James Farwell residence to be in Peterville? ((yes)/no)

Do you consider the Gino Santanna Residence to be in Peterville? ((yes)/no)

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 3

Number of residents with respiratory problems 1

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation Yes

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) Yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) Yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 3

Number of residents with respiratory problems 2

Number of children under the age of 8 years NONE

Do you oppose the Fanter Concentrated Animal Feeding Operation yes

Do you consider your residence to be part of Peterville? (yes) or no) yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 5 + 1 on the way

Number of residents with respiratory problems None

Number of children under the age of 8 years 3

Do you oppose the Fanter Concentrated Animal Feeding Operation Yes

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) Yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) Yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 4

Number of residents with respiratory problems 1

Number of children under the age of 8 years 2

Do you oppose the Fanter Concentrated Animal Feeding Operation Yes

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) Yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) Yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems 1

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation yes

Do you consider your residence to be part of Peterville? (yes or no) yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems NONE

Number of children under the age of 8 years NONE

Do you oppose the Fanter Concentrated Animal Feeding Operation YES

Do you consider your residence to be part of Peterville? (yes or no) YES

Do you consider the James Farwell residence to be in Peterville? (yes/no) YES

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) YES

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address Havana Dr

Number of residents in the household 2

Number of residents with respiratory problems 0

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation N-A

Do you consider your residence to be part of Peterville? (yes or no) yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address _____

Number of residents in the household 1

Number of residents with respiratory problems 1

Number of children under the age of 8 years 0

Do you oppose the Fanter Concentrated Animal Feeding Operation Yes

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) Yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) Y.O

Signed _____

Peterville Census, May 2020

Name [redacted]

Address [redacted]

Number of residents in the household 2

Number of residents with respiratory problems None

Number of children under the age of 8 years None

Do you oppose the Fanter Concentrated Animal Feeding Operation No

Do you consider your residence to be part of Peterville? (yes or no) Yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) yes

Signed Reg Bahn

Peterville Census, May 2020

Name [redacted]

Address [redacted] Havana

Number of residents in the household 4

Number of residents with respiratory problems

Number of children under the age of 8 years 1

Do you oppose the Fanter Concentrated Animal Feeding Operation no

Do you consider your residence to be part of Peterville? (yes or no) yes

Do you consider the James Farwell residence to be in Peterville? (yes/no) yes

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no) yes

Signed [redacted]

Peterville Census, May 2020

Name [redacted]

Address_____

Number of residents in the household_____

Number of residents with respiratory problems _____

Number of children under the age of 8 years _____

Do you oppose the Fanter Concentrated Animal Feeding Operation _____

Do you consider your residence to be part of Peterville? (yes or no) _____

Do you consider the James Farwell residence to be in Peterville? (yes/no)_____

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no)_____

Signed _____

Peterville Census, May 2020

Name [redacted]

Address _____

Number of residents in the household 2

Number of residents with respiratory problems _____

Number of children under the age of 8 years _____

Do you oppose the Fanter Concentrated Animal Feeding Operation _____

Do you consider your residence to be part of Peterville? (yes or no) _____

Do you consider the James Farwell residence to be in Peterville? (yes/no)_____

Do you consider the Gino Santanna Residence to be in Peterville? (yes/no)_____

Signed _____

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Monday, June 28, 2021 5:40 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: RE: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL

Here is additional information about the endangered species present on the illegally sited Fanter CAFO. The CAFO site is classic habitat for the chorus frog, which lives and feeds much of its life in sand prairie terrain near wet areas. The aquifer natually surfaced near the CAFO site, though now is drained iwth ditches, but marshy areas and ditches provide the water habitat needed for other stages in the chorus frog's life. Much of Illinois' sand prairie habitat is in Western Mason County.

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.reptilesmagazine.com%2Fillinois-wind-project-may-threaten-chorus-frog%2F&data=04%7C01%7C%7Cff26a4ddf39942fa0bc508d93a85e477%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637605169003850824%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=gUqiaoP7O99VOBLGK1xLYlaIExydYY016sTfSiN6agk%3D&reserved=0

[redacted]

subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Monday, June 28, 2021 3:52 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: RE: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL
Attachments: Notes on Environmental Study.pdf

I still have received no notification from Illinois Department of Ag or the Illinois Attorney General's office.

Attached are comments on the draft environmental study. I would be happy to try to clarify any of these points. I don't think US Census Data is specific enough to document Peterville as a low income community. I wish we had included that question on the Peterville Census, but if it's a critical issue, I'm sure we could re-do it with written confirmation that the households are low income. Please let me know if that would be helpful.

[redacted]

---------- Original Message ----------
From: "Gehrke, John - FSA, Springfield, IL" <john.gehrke@usda.gov>
To: [redacted]
Subject: RE: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL
Date: Mon, 21 Jun 2021 15:05:35 +0000

Mr. [redacted],

We acknowledge receipt of your email and attachments. Have you received a response from the Illinois Department of Agriculture or the Illinois Attorney General in regards to your allegations?

John W. Gehrke
Farm Loan Chief
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

-----Original Message-----
From: [redacted]
Sent: Wednesday, June 16, 2021 5:09 PM
To: Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov>
Subject: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL

[External Email]

Dear Mr. Gehrke:

I am very pleased to learn that you are reviewing this horribly sited facility. As explained in my attached letter to the Illinois Attorney General's Office, the site is less than a half mile of Peterville, Illinois, a small town platted in 1868. Their nearly fifty residents included three elderly people on oxygen and eight small children with one on the way. Peterville is on sandy soil with the Mahomet Aquifer so near the surface that the surface often rises above ground level. All Peterville homes are on shallow sand point wells, and the family of one of the Fanter applicants owns the farmland that adjoins Peterville to the west. Neither of the applicants grew up on farms and neither have an ag education. Even well applied manure would be a major public health hazard so near these homes. There was a major aquifer flood in that area in 1993 that left roads impassable. CR 1100 N adjoins the CAFO site and passes over a very wet spot near the top of the aquifer between the CFO and IL 97. This would cause major road damage in wet weather. As I'm sure you're aware, the Mahomet Aquifer is the largest in Illinois and directly provides drinking water to about a half million residents. The aquifer tops off into the Illinois River a few miles west of Peterville. Excess phosphate from hog manure is a major problem in the Illinois/Mississippi River Systems and well out into the Gulf of Mexico.

I have also attached a letter to the Illinois Department of Agriculture. They seem to recognize that their own siting rule is in violation of State Law and have promised to contact me when their attorney's have reviewed the situation. There is also a PDF of a petition of over a hundred people who live in and near Peterville who object to the CAFO and a copy of original Peterville May 20 Census cards, most of which are signed by representatives of households.

I would be very pleased to provide any additional information that might be helpful to your investigation.

I am a Mason County Board member and on the Mason County Board's Agriculture Committee. The Illinois Livestock Facilities Management Act is very lax and needs to be more restrictive. Illinois Department of Agriculture and Illinois EPA both seem to lack the resources to do a decent job of complying even with existing siting regulations. The Fanter CAFO at Peterville never should have been approved.

[redacted]

Objections to the draft environmental study of the Fanter Hog Confinement, Peterville (Kilbourne), Illinois
1.5.2
The site is the habitat of the endangered Illinois chorus frog, which makes construction there in violation of the Endangered Species Act of 1973. Surrounding areas are often wet and provide habitat. Construction excavation often destroys these endangered frogs. The endangered Eastern prairie fringed orchid is also native and present on the CAFO site, though the applicants may be trying to suppress it.
3. A very thin layer of light sand between the surface and top of the aquifer should be considered. In most years, the aquifer is visible above ground level in nearby points.
The area around the CAFO site was flooded in 1993, making roads impassable. Shouldn't this be considered under floodplains and wetlands? The nearest intersection between the CAFO and IL 97 is a very wet spot with the aquifer surfacing there in most wet years. This also burdens the township with paying for repairs to an asphalt road that would carry year round traffic of heavy feed, waste, and hog trucks. Heavy farm vehicles normally don't use the road during the wet season.

There are already well over 60,000 hogs residing in the Western Portion of Mason County. Nearly all are found on sandy soil on elevations only slightly above normal aquifer surface levels. Twenty-one active hog confinements, one of which is a farrowing operation, are operated by Maschhoff within a few miles of Bath, Illinois. These operations all involve open lagoons for waste. https://www.acrevalue.com/map/IL/?lat=40.168006&lng=-90.103943&zoom=16 https://www.acrevalue.com/map/IL/?lat=40.132915&lng=-90.09498&zoom=16 I know of three other active CAFOs that are privately owned, though animals in two of them are owned by Mashhoff and one by Tri-Oak.

Socio and environmental justice issues that should be considered include the fact that a majority of Peterville's 47 residents are living below the Federal Poverty Level. Three elderly adults depend on daily oxygen to live and have no other place to go. People with COPD, severe asthma, and similar respiratory diseases are more susceptible to CAFO pollution than the general public. These residents are in Peterville the edge of which is under a half mile from the CAFO. There are also eight small children living in Peterville with another on the way. One nearby resident, John Friend, is a special needs adult in his 60's that isn't able to drive and lives only a little over a quarter of a mile directly downwind of this CAFO. He was not notified of the planned CAFO until long after the Illinois Department of Agriculture approved the application, and the original application provides false information about the permanent nature of his home, well, and septic system. He now assumes that if the CAFO is allowed to be built, he must seek another place to live, despite being single and living well below the Federal Poverty Level. Live most residents in and near Peterville, his well is a shallow sandpoint since his home is only a few feet about the average surface level of the Mahomet Aquifer. It is my understanding that his case alone would disqualify loan approval based on provisions of the Environmental Justice and National Environmental Policy Act.

3.2.7 Air Quality
Emissions from the CAFO and manure spreading is especially problematic in this case due to a number of people within a mile or less of the CAFO and even closer to the presumed manure spreading area. Three of these elderly low income residents are already on oxygen and especially susceptible to poor air quality.

4.2.2 Local air quality in the area is often considered to be poor based on ozone. Emissions from the CAFO will contribute to ozone problems. A special needs adult, John Friend, lives slightly over a quarter of a mile west of the CAFO and assumes that this will mean he must move, despite having no other home to go to. He was not made aware of the project prior to its approval, despite the fact that his niece is a co-applicant. Mr. Friend is not able to drive. His home is directly downwind of the project and there are about twenty residences within a mile of the facility. Fourteen of these homes are within the contiguous portion of Peterville, a community platted in 1868, which has expanded from the original plat. Two Peterville homes are shown within the half mile circle in the application. The CAFO is illegally sited since Illinois Law requires a half mile set back from a populated place and defines a populated place as ten or more dwellings. The Randy Burgett property shown on the following hybrid satellite map, is part of the 1868 Peterville Plat and even the applicant's half mile circle includes part of his original plat property. If the circle is

adjusted to the northwest corner of the illegally sited Fanter CAFO, the Burget residence falls within a half mile. Peterville has of course expanded beyond the original plant and the Peterville Census I sent you earlier confirms that nearly all Peterville residents consider the Santanna and Farwell Property to also be part of Peterville. The hybrid map actually says PETERVILLE between these two residences. If you log into the following page with a free account, these property owners and their residential parcels appear. The illegally sited CAFO is less than a half mile east of the intersection of Peterville Road on the southside of CF 1100 N.
https://www.acrevalue.com/map/IL/?lat=40.217485&lng=-89.992005&zoom=15

IMPACTS
There is no evidence to suggest that “industry best practices” will be employed with this project. I have witnessed hog waste from other Mashhoff and Tri Oak locations in the county being sprayed over fields and without testing for composition or accurate measuring of application rates and without being knifed in. There seems to be little confidence in the applicants among Peterville residents. Opinions I heard voiced within Peterville are sceptical of the applicant’s abilities, intents, work ethic,capabilities, and education. I’m told that though he currently works as a farm laborer for the Friend Estate, he did not grow up in a farm family, and has no education beyond high school.

4.1 Cumulative impacts
There are already well over 60,000 hogs being raised over the Mahomet aquifer on thin sandly solid near the surface of the aquifer. The Illinois Department of Agriculture does not even have a comprehensive list of where CAFOs are located. Most Mason County wells already test with warnings on high nitrates. Excess phosphorus, antibiotics, and dangerous pathogens are also a threat, not only to the Mahomet Aquifer, but also to the river system it tops off into in Western Mason County at the Illinois River. Phosphorus, abundant and excessive in hog manure, is a particular problem in the river system down and well past the mouth of the Mississippi RIver. There is no policing of how and when this manure is applied to soils and this may prove to be a major public health crisis in Peterville.

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted] [redacted] 2021 11:56 AM
To: Gehrke, John - FSA, Springfield, IL
Cc: democratnewspaper@gmail.com
Subject: [External Email]Illegally sited proposed Fanter CAFO, Peterville/Kilbourne, Illinois
Attachments: Screenshot 2021-08-04 11.14.00 AM.png; Screenshot 2021-08-04 11.20.47 AM.png; Screenshot 2021-08-04 11.24.17 AM.png; Screenshot 2021-08-04 11.29.24 AM.png

Is the environmental review on the loan for this hog confinement still in process? The following information is relevant.

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hurleyfh.com%2Fobituaries%2FJohn-Friend%2F%23!%2FObituary&data=04%7C01%7C%7Ce319218c00d745b9901608d9576b0239%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637636939401929820%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=60qVsbZwZSvRe1MCmY%2BFFKMZzUbPMdU6UQYAUft7TNs%3D&reserved=0

I was told that he was found laying in the grass near his home, which is slightly over a quarter mile east of the Fanter CAFO Site. Apparently he'd been there about a week. He is the uncle of Amy Beck Fanter, a co-applicant on the CAFO. He told me he wasn't told about the CAFO until "very recently" when I talked with him in June. He said he'd lived in his small home there for about five years, and assumed he would have to move. His home was falsely claimed to be temporary and mobile in the CAFO application papers, his well was ignored, and it was claimed that he did not received mail there, though it wasn't mentioned that his mailbox had been repeatedly vandalized. The last time I was there, a substantial mailbox post was still there. He wasn't able to drive and he told me it was just too much trouble to try to keep the mailbox in tact. I don't know his cause of death. He did seem to be despondent over being forced out of his home by the CAFO.

Attached is a screen shot of 14 Maschhoff owned CAFO's, 1.5 to 2 miles SE of Bath. This have large open sewage lagoons, which you can see in the screen shot.

The second is a Maschhoff farrowing operation about a mile and a half west and slightly south of Fairview Methodist Church.

The third is a Maschhoff owned CAFO related facility that I know little about. I was told that it is currently inactive, but haven't been there to see.

Third fourth screen shot is a Maschhoff owned CAFO on 500 N at about 1400 E with seven more standard sized hog barns and open sewage lagoons.

I'm not able to estimate the hog population of the farrowing operation. The 21 hog confinement buildings in the first two screen shots appear to be standard 2499 hog size, which yields an estimated hog population of about 55,000 Mashhoff owned hogs in Maschhoff owned facilities. Adding the Brian Gathman and Andy Gathman facilities which are filled with Maschhoff owned hogs, that brings known Maschhoff owned hog population in Mason County, not including

piglets and sows in the farrowing operation, to about 57,000 Maschhoff owned hogs. All of these facilities are on "uncontained" portions of the Mahomet Aquifer. There are also about 2499 Tri Oak (another hog raising oligarch) owned hogs in the Chris/Jeremy Gathman CAFO, which is on the corner of 1500 N and 2600 E. I think 60,000 hogs over uncontained portions of the aquifer in Mason County is a conservative estimate. There is another farrowing operation near the SW corner of Kilbourne, and a few smaller farrowing and or feeding operations throughout the county.

[redacted]

NetZero Message Center | Hazel NANNEN Obituary (2015) | Ad rants - Google Docs | County Board - Google Docs | Illinois Farmland Values, Soil Sur

acrevalue.com/map/IL/?lat=40.17104&lng=-90.104155&zoom=15

Corn Price: Latest P... | (20+) Mason Count... | FollowMyHealth® L... | NetZero Message C... | État civil | Non coté... | Scroll All | carsonhy... | (94) Facebook | SANCO/7022/2013... | Compeer | acad | Reading list

AcreValue

Map / Plans / Pro / Help / mcharryh@netzero.net

Parcels | Bath, Illinois, United States | State | County | Parcel # | Owner | More

Showing all Parcels.

1 FIELD | Get Full Report

Map | List

20N 9W 21

N 9W 20

N County Rd 1400 E

700N

Hybrid | Map

mapbox

PARCEL

ACREVALUE	n/a
ACRES	101.7
PI	76
OWNER (11/09/20)	MASCHHOFFS LLC

Selected Field 37 ac | Clear All

1 ACREVALUE $5,453/ac

ACRES	37.5 ac
LOCATION	Mason County, IL 20N 9W – 17
PARCEL ID	1617400003

AcreValue provides valuation, soil survey, and crop history reports for individual fields of farmland. Our valuation model utilizes over 20 field-level and macroeconomic data variables to estimate the value of an individual plot of farmland in California, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Nebraska, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, and Wisconsin. Soil information is sourced from the SSURGO database developed by the National Cooperative Soil Survey. Crop history information is sourced from the NASS

NetZero Message Center | Hazel NANNEN Obituary (20 | Ad rants - Google Docs | County Board - Google Docs | Illinois Farmland Values, Soil | fairview methodist church, b

acrevalue.com/map/IL/?lat=40.10329&lng=-90.210221&zoom=15

Corn Price: Latest P... | (20+) Mason Count... | FollowMyHealth® L... | NetZero Message C... | État civil | Non coté... | Scroll All | carsonhy... | (94) Facebook | SANCO/7022/2013... | Compeer | acad | Reading list

AcreValue

Map / Plans / Pro / Help / mcharryh@netzero.net

Parcels | Bath, Illinois, United States | State | County | Parcel # | Owner | More

Showing all Parcels.

2 FIELDS | Get Full Report

Map | List

N County Rd 600E | E County Rd 300N | E County Rd 310N | 800E | 250N

PARCEL

ACREVALUE	n/a
ACRES	20.0
PI	87
OWNER (11/09/20)	MASCHHOFFS LLC

19N 10W 16 | 19N 10W 15 | 19N 10W

Hybrid | Map

mapbox

Selected Fields 139 ac

Clear All

1

ACREVALUE	$5,453/ac
ACRES	37.5 ac
LOCATION	Mason County, IL 20N 9W – 17
PARCEL ID	1617400003

2

ACREVALUE	n/a
ACRES	101.7 ac
LOCATION	Mason County, IL 20N 9W – 21, 22
PARCEL ID	1622100001

AcreValue provides valuation, soil survey, and crop history reports for individual fields of farmland. Our valuation model utilizes over 20 field-level and macroeconomic data variables to estimate the value of an individual plot of farmland in California, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Michigan,

NetZero Message Center | Hazel NANNEN Obituary (20 | Ad rants - Google Docs | County Board - Google Docs | Illinois Farmland Values, Soil | fairview methodist church, b

acrevalue.com/map/IL/?lat=40.112349&lng=-90.084479&zoom=15

Corn Price: Latest P... | (20+) Mason Count... | FollowMyHealth® L... | NetZero Message C... | État civil | Non coté... | Scroll All | carsonhy... | (94) Facebook | SANCO/7022/2013... | Compeer | acad | Reading list

AcreValue

Map / Plans / Pro / Help / mcharryh@netzero.net

Parcels | Bath, Illinois, United States | State | County | Parcel # | Owner | More

Showing all Parcels.

3 FIELDS | Get Full Report

Map | List

E County Rd 400N | N County Rd 1250E | N County Rd 1300E | 1390E | N County Rd 1500E

19N 9W 10

E County Rd 320N | N County Rd 1420 E | N County Rd 1250E | N County Rd 300N

White City

Hybrid | Map

mapbox

PARCEL

ACREVALUE	n/a
ACRES	29.4
PI	72
OWNER (11/09/20)	MASCHHOFFS LLC
	View all parcels with this owner
OWNER ADDRESS	Upgrade to view
SLOPE	5.0%

2019 CROPS

Developed	34.9%
Forest	24.9%
Non-Cropland	13.0%
Grass/Pasture	12.4%

LOCATION Mason County, IL 19N

Get Full Report

PARCEL ID 2310200002

Owner Options

Selected Fields 169 ac

Clear All

1 ACREVALUE $5,453/ac
ACRES 37.5 ac
LOCATION Mason County, IL 20N 9W – 17
PARCEL ID 1617400003

2 ACREVALUE n/a
ACRES 101.7 ac
LOCATION Mason County, IL 20N 9W – 21, 22
PARCEL ID 1622100001

3 ACREVALUE n/a
ACRES 29.4 ac
LOCATION Mason County, IL 19N 9W – 10
PARCEL ID 2310200002

AcreValue provides valuation, soil survey,

AcreValue

Parcels | Bath, Illinois, United States | State | County | Parcel # | Owner | More

Showing all Parcels.

4 FIELDS | Get Full Report

Map | List

500N 500N 500N

N County Rd 1300E

19N 9W 3

Hybrid | Map

mapbox

PARCEL

ACREVALUE	n/a
ACRES	11.9
PI	75
OWNER (11/09/20)	MASCHHOFFS LLC
	View all parcels with this owner
OWNER ADDRESS	Upgrade to view
SLOPE	0.8%

2019 CROPS

Non-Cropland	34.8%
Corn	17.8%
Developed	13.1%
Water	11.2%

LOCATION Mason County, IL 19N 9W – 34

PARCEL ID 2303200001

Get Full Report

Owner Options

Selected Fields 180 ac

Clear All

1 ACREVALUE $5,453/ac
ACRES 37.5 ac
LOCATION Mason County, IL 20N 9W – 17
PARCEL ID 1617400003

2 ACREVALUE n/a
ACRES 101.7 ac
LOCATION Mason County, IL 20N 9W – 21, 22
PARCEL ID 1622100001

3 ACREVALUE n/a
ACRES 29.4 ac
LOCATION Mason County, IL 19N 9W – 10
PARCEL ID 2310200002

4 ACREVALUE n/a

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
[redacted]34 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: RE: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL

No, though Illinois Department of Agriculture's Mr. Beaver seemed to realize that their departmental rule was in fact in violation of the legislation. He said he would contact their legal department and get back to me, but has not, and the approval still appears on their list. I've heard nothing from the Illinois Attorney General's Office.

Above and beyond the law, I think applying hog manure immediately adjacent to Peterville is asking for a public health disaster. The aquifer is so high there than sand point wells are very shallow, and that is what everyone uses these. There are eight small children with one on the way and also three elderly people who are on oxygen.

[redacted]

---------- Original Message ----------
From: "Gehrke, John - FSA, Springfield, IL" <john.gehrke@usda.gov>
To: [redacted]Kilbourne, IL
Date: Mon, 21 Jun 2021 15:05:35 +0000

[redacted]

We acknowledge receipt of your email and attachments. Have you received a response from the Illinois Department of Agriculture or the Illinois Attorney General in regards to your allegations?

John W. Gehrke
Farm Loan Chief
Illinois Farm Service Agency, USDA
3500 Wabash Ave.
Springfield, IL 62711-8287
Phone (217) 331-6873
FAX (855) 800 1760

Stay Connected with USDA:

USDA is an equal opportunity provider, employer, and lender.

-----Original Message-----
From: [redacted]
Sent: Wednesday, June 16, 2021 5:09 PM
To: Gehrke, John - FSA, Springfield, IL <john.gehrke@usda.gov>
Subject: [External Email]Illegally sited Fanter CAFO, Peterville/Kilbourne, IL

[External Email]

Dear Mr. Gehrke:

I am very pleased to learn that you are reviewing this horribly sited facility. As explained in my attached letter to the Illinois Attorney General's Office, the site is less than a half mile of Peterville, Illinois, a small town platted in 1868. Their nearly fifty residents included three elderly people on oxygen and eight small children with one on the way. Peterville is on sandy soil with the Mahomet Aquifer so near the surface that the surface often rises above ground level. All Peterville homes are on shallow sand point wells, and the family of one of the Fanter applicants owns the farmland that adjoins Peterville to the west. Neither of the applicants grew up on farms and neither have an ag education. Even well applied manure would be a major public health hazard so near these homes. There was a major aquifer flood in that area in 1993 that left roads impassable. CR 1100 N adjoins the CAFO site and passes over a very wet spot near the top of the aquifer between the CFO and IL 97. This would cause major road damage in wet weather. As I'm sure you're aware, the Mahomet Aquifer is the largest in Illinois and directly provides drinking water to about a half million residents. The aquifer tops off into the Illinois River a few miles west of Peterville. Excess phosphate from hog manure is a major problem in the Illinois/Mississippi River Systems and well out into the Gulf of Mexico.

I have also attached a letter to the Illinois Department of Agriculture. They seem to recognize that their own siting rule is in violation of State Law and have promised to contact me when their attorney's have reviewed the situation. There is also a PDF of a petition of over a hundred people who live in and near Peterville who object to the CAFO and a copy of original Peterville May 20 Census cards, most of which are signed by representatives of households.

I would be very pleased to provide any additional information that might be helpful to your investigation.

I am a Mason County Board member and on the Mason County Board's Agriculture Committee. The Illinois Livestock Facilities Management Act is very lax and needs to be more restrictive. Illinois Department of Agriculture and Illinois EPA both seem to lack the resources to do a decent job of complying even with existing siting regulations. The Fanter CAFO at Peterville never should have been approved.

[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Thursday, June 24, 2021 3:04 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Fanter CAFO at Peterville

As a concerned citizen I am writing about Fanter CAFO at Peterville. I stand behind farmers in that area who do not want a CAFO in their area. All the information I have read about what Iowa and Missouri has gone through with CAFO's I don't want to see anyone in Illinois go through the same thing with air pollution, unsafe water and loss of property value. A CAFO is being planned less than a half mile from my land. Our country is so concerned about air pollution and water pollution from factories and CAFO's are factories.

I would like to see laws changed concerning CAFO's that would protect our health and our rights as citizens.

Thank you

[redacted]

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Monday, July 12, 2021 8:57 PM
To:
Cc: [redacted]

Subject: [External Email]Re: Standing surface water runoff

The date of the photo was today / July 12 at 1742 hours - gs

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Wednesday, June 30, 2021 11:39 PM
To: Gehrke, John - FSA, Springfield, IL
Subject: [External Email]Comments of Karen Hudson July 1, 2021 are: Fanter Farms EA FSA Loan

Final FSA Comments Hudson


Photos taken
June 29, 2920
Mason county
near CAFO site


Peoria County
Princeville, Illinois
N Princeville Jubilee Rd

--
Sent from Gmail Mobile

McMillin, Jason - FPAC-BC, Fort Worth, TX

From: [redacted]
Sent: Monday, July 12, 2021 8:46 PM
To: [redacted]
Cc: [redacted]
Subject: [External Email]Re: Standing surface water runoff

Please let us know the date of this photo
Thx!

On Mon, Jul 12, 2021 at 9:41 PM [redacted] wrote:

> Mr. Gehrke,
> Attached are a couple photos of the surface water runoff that is at the intersection of CR1100N and Peterville Rd. There is the standing water you see at the intersection and all along both sides of the roadway all the way to and past the Fanter CAFO site in Mason county which is located LESS than 1000 feet down that road.
> Thank you for your time, Gino Santanna

--
Sent from Gmail Mobile

Socially Responsible Agriculture Project
1120 Washington Ave. Suite 200 Golden, CO 80401
(503) 362-8303

For Immediate Release

Contact:
Karen Hudson, karenh@sraproject.org, (309) 208-8846
Kay Curtis, (217) 361-5770

June 30, 2021

Hog CAFO Threatens Water Quality of Mahomet Aquifer – Residents Concerned About Health, Safety, and Access to Clean Water and Air

Mason County, Illinois – Mason County Concerned Citizens (MCCC) has partnered with Illinois Coalition for Clean Air & Water (ICCAW) and the Socially Responsible Agriculture Project (SRAP) to submit comments to the USDA Farm Service Agency (FSA) on the impacts of a swine concentrated animal feeding operation (CAFO) proposed by Fanter Farms in Mason County Illinois.

The site is located over the Mahomet Aquifer which was designated as a Sole Source Aquifer in 2015. Over half the population in east-central Illinois relies on the Mahomet Aquifer system as the sole source of their drinking water.

Fanter Farms recently applied for a Beginner Farmer Loan through the USDA direct and guaranteed FSA loan program to construct the 2,400 head swine CAFO. Prior to approving a loan to finance a CAFO, FSA must consider the potential impact on local water sources and ecology via an environmental review. In accordance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the Endangered Species Act, FSA is required to consider the environmental and cultural impacts of government loans that are approved through its program. Areas of special concern such as effects on minority and low-income populations and water resources are among issues to be evaluated.

The FSA recently issued a public notice regarding the Fanter project and invites public comment as they complete the current environmental assessment (EA).

Residents are concerned that the project's proposed site is located near existing residences and would expose residents to the public health effects associated with industrial livestock operations. Many residents living in the community of Peterville near the proposed site experience serious health issues, are on supplemental oxygen, and are low-income minority populations.

Scientific research has shown, over and over again, that industrial livestock operations can contribute to health problems, lack of access to safe drinking water, and unsafe air to breathe for communities living nearby.

Furthermore, an industrial CAFO coming into the neighborhood would negatively impact property values, destabilize the local socioeconomic structure, and would endanger the Illinois Chorus Frog – which is a vulnerable and threatened species.

The high potential of the Mahomet Aquifer – which is the sole source for drinking water for a large portion of Illinois – to be contaminated by the CAFO's operations is critically concerning.

A new Bill (SB 2515) to create a permanent Mahomet Advisory Council dedicated to protect the Mahomet Aquifer passed both houses in the General Assembly and is currently on the Governor's desk. **The proposed CAFO is a direct and serious threat to the safety of the aquifer.**

"Agricultural runoff has long been noted as one of the threats to the integrity of the Mahomet Aquifer. The passage of this bill is timely, in that it recognizes the urgency to preserve the drinking water purity for all of East- Central Illinois," **stated Karen Hudson of ICCAW and SRAP**. "*The future of the Mahomet lies in the hands of the FSA who is using our tax dollars to either subsidize or deny loans for projects that could affect almost 500,000 residents whose lives and livelihoods rely on a clean water source."*

The MCCC is also submitting new photos showing flooded fields from recent heavy rains. Drainage ditches in the area often have year- round standing water due to the elevated aquifer. There are also sections of farm fields unable to be planted for three years in a row due to constantly saturated ground, according to the coalition.

"*This project is trying to place 2400 swine and their 10 ft deep waste pits along my road that was rebuilt & elevated one and a half feet after severe flooding inundated us in 1993*," **stated Kay Curtis, one of the nearest neighbors to the site**. "*It makes zero sense to store and spread the untreated waste of over two thousand hogs in our sandy and soggy neighborhood. The last thing our aquifer and shallow private wells need is more animal waste runoff and leaks*."

###

About Socially Responsible Agriculture Project

For more than 20 years, Socially Responsible Agriculture Project (SRAP) has served as a mobilizing force to empower communities to protect themselves from the damages caused by industrial livestock operations and to advocate for a food

system built on regenerative practices, justice, democracy, and resilience. Our team includes technical experts, independent family farmers, and rural residents who have faced the threats of factory farms in their communities. When asked for help, SRAP offers free support, providing communities with the knowledge and skills to protect their right to clean water, air, and soil and to a healthy, just, and vibrant future. www.sraproject.org

About Illinois Coalition for Clean Air and Water

Illinois Coalition for Clean Air and Water (ICCAW) is a state-wide coalition of family farmers and community groups advocating for sound policies and practices that protect the environment, human health, and rural quality of life from the impacts of large-scale, industrialized livestock production facilities in Illinois. www.iccaw.org

About Mason County Concerned Citizens

The Mason County Concerned Citizens coalition supports responsible livestock production and is calling for stronger livestock regulations that will better protect public health and future rural development in Illinois.

###