

United States Department of Agriculture Farm Service
Agency

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
For
Implementation of
Fanter Farms FSA Financing

The United States Department of Agriculture, Farm Service Agency (FSA) has prepared a Final Environmental Assessment (EA) to evaluate the environmental consequences associated with approving a farm ownership loan for the construction of a single 193'x 101' swine building with a 10' deep pit for manure storage. The 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

Proposed Action

In this project FSA-Farm Loan Programs has an application to finance the construction of a single 193' x 101' swine buildings with a 10' deep pit for manure storage. This is considered the best alternative as the impacts are not significant and the other alternative offers no environmental advantage.

Continue with Project as Planned is the preferred alternative. This is the most viable alternative and does subject the environment to any significant impacts. Therefore, the preferred alternative is to continue with the project as planned if it can be approved on its own merits.

Environmental Impacts

In consideration of the analysis documented in the Environmental Assessment completed on September 14, 2021 and the mitigation implemented as outlined in this FONSI, the preferred alternative will not have a significant impact on the quality of human or natural environment:

1. Both beneficial and adverse impacts of implementing the preferred alternative have been fully considered within the Environmental Assessment. The benefits outweigh any potential adverse impacts. Potential adverse cumulative impacts are expected to be minor as implementation of the preferred alternative will cause little if any adverse impact on the area of potential effect and the human environment.
2. The preferred alternative will not significantly affect public health or safety.
3. The preferred alternative would not significantly affect any unique characteristics which includes historic and cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers or ecological critical areas.
4. The preferred alternative does not significantly impact the quality of the human environment that is likely to be controversial with the implementation of the defined mitigation measures listed below.

5. The preferred alternative would not impose highly uncertain or involve unique or unknown risks.
6. The preferred alternative would not establish a precedent for future actions with significant effects and does not represent a decision in principle about a future consideration.
7. The preferred alternative is not related to other actions with individually insignificant but cumulative significant impacts. Cumulative impacts of implementing the preferred alternative were determined to not be significant.
8. The preferred alternative would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Registry of Historic Places or cause loss or destruction of significant scientific, cultural or historic resources.
9. The preferred alternative would not have adverse effects on threatened or endangered species or designated critical habitat. In accordance with Section 7 of the Endangered Species Act, there is no effects of implementing the preferred alternative on threatened and endangered species and designated habitat and informal consultation was not necessary.
10. The preferred alternative does not threaten to violate a Federal, State or local law or requirements imposed for protection of the environment.

Mitigation Measure

Consultation with EPA, completed on August 12, 2021, regarding the Mahomet Sole Source Aquifer identified the below mitigation. The EPA found that, if followed, the project is not likely to contaminate the Mahomet Sole Source Aquifer. Each of the recommendations will be implemented to mitigate any potential adverse effects:

- 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 (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 characteristics⁹, 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).

Determination

According to the National Environmental Policy Act and FSA's environmental regulations at 7 CFR Part 799 implementing the regulations of the Council on Environmental Quality, 40 CFR Parts 1500-1508, I find that the Proposed Action is not a major Federal action significantly affecting the quality of the human environment. Therefore, no environmental impact statement will be prepared.

Approved:

9/16/2021

Signature

Date

John W. Gehrke
Name

Farm Loan Chief / SEC
Title