DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 7, 2020

Nico Coetzee
Golden Dakota Farms, LLC
48188 221st Street
Elkton, SD 57026

RE: Golden Dakota Farms, LLC – Proposed Underground Irrigation Distribution System Revised Plans and Specifications Review

Dear Mr. Coetzee:

The Department of Environment and Natural Resources received four copies of the plans and specifications for your proposed underground irrigation distribution system for state permit coverage under the 2017 *General Water Pollution Control Permit for Concentrated Animal Feeding Operations* (general permit), **permit application number SDG-100211**. Your existing manure management system is permitted under the 2017 state general permit and is located in the Southeast ¼ of Section 3, Township 108 North, Range 48 West in Moody County, South Dakota.

Your existing permitted manure management system is for a housed lot feeding a maximum of 4,000 mature dairy cattle and 75 dairy calves. Your existing system consists of a flume system in each of the eight freestall barns, piping, diversion dikes or channels, a calf hut area between the north freestall barns, a concrete sand settling lane, an open exercise lot, four settling ponds, three holding ponds, and 5.71 acres of drainage area. The existing holding pond system meets the requirements of the general permit and has at least 365 days of liquid storage capacity.

Your proposed underground irrigation distribution system will consist of 10-inch PVC and will begin with a riser near the southwest corner of Holding Pond #2 located in the Southwest ¼ of the Southeast ¼ of Section 3, Township 108 North, Range 48 West in Moody County, run west to a point just into the West ½ of Section 3, and then north beneath 220th Street to a point at least five feet north of the Right of Way (ROW) in Brookings County. From this point, the underground irrigation pipeline will run east along 220th Street a minimum five feet north of the ROW to an above ground booster pump and manifold that will be located in the Southeast ¼ of the Southeast ¼ of Section 33, Township 109 North, Range 47 West in Brookings County. From the manifold, there will be three 10-inch PVC pipelines that will connect to existing 8-inch PVC pipelines and pivots as follows.

- Line #1 will connect to an existing pipeline located between Pivot #1 located within *Field #46* and Pivot #4 located within the west part of *Field #48-A*. Existing Wells #1 and #4 are located near Pivot #1;

- Line #2 will connect to a new above ground manifold to be installed between Well #2 and Pivot #2 which are located near the center of *Field 47-A* and continue on to connect to the existing pipeline near Well #3 located in the northeast portion of *Field 47-A* that supplies water to Pivot #3 located within *Field 47-B* which is located within Lincoln County, MN; and
- Line #3 will connect to an existing pipeline located between Well #5 located in the southeast portion of *Field 47-A* and Pivot #5 located in the southeast portion of *Field 48-A*. Pivot #5 also irrigates a portion of *Field 48-B* which is located within Pipestone County, MN.

We have reviewed and hereby conditionally approve the proposed underground irrigation distribution system. This approval expires on July 7, 2022, unless installation of the proposed underground irrigation distribution system has started by that date. Once construction has commenced, you will have three years to complete construction and submit a Notice of Completion. If construction is not completed within the three-year timeframe this approval will expire. Two copies of the approved plans and specifications are being retained for our files, requirements pertaining to the proposed underground irrigation distribution system that you must implement are listed on the attached pages, and additional requirements for your operation pertaining to your coverage under the 2017 state general permit are identified in the departments May 11, 2020, approval letter.

A portion of the existing underground irrigation piping between Well #3 and Pivot #3, the area covered by Pivot #3, and a portion of the area covered by Pivot #5 are located within Minnesota. You need to contact the Lincoln County Feedlot Officer in Ivanhoe, the Pipestone County Feedlot Officer in Pipestone, and the Minnesota Pollution Control Agency (state agency) for information on their requirements pertaining to the land application of manure and wastewater.

If any deviations are required from the approved plans, as-built plans will be required. A complete set of as-built plans will be required if any major deviations result. Upon completion of construction, the enclosed Notice of Completion must be returned to the department. **You cannot use the proposed underground irrigation pipeline to transport wastewater until your Certificate of Compliance and coverage under the 2017 state general permit are amended to include the underground irrigation distribution system. Once the Notice of Completion has been received and a satisfactory construction inspection has been conducted, the department will issue an amended Certificate of Compliance and grant amended coverage under the 2017 state general permit to include the underground irrigation distribution system.**

Continued compliance is dependent upon you performing proper operation and maintenance activities. You will be liable for any noncompliance with applicable South Dakota environmental laws or regulations.

Our review covers works of sanitary significance and does not cover items such as quality of material, structural soundness, or electrical and mechanical design features. Approval of the plans and specifications does not in any way release the applicant from the responsibility that the project will be an operable facility when construction is completed.

If you have any questions regarding the content of this letter, please feel free to contact Paul Wegleitner, Feedlot Permit Program at (605) 773-3351. Thank you for your cooperation.

Sincerely,

Kent R. Woodmansey, PE, Engineering Manager
Feedlot Permit Program
Phone: (605) 773-3351

cc: Brian Friedrichsen, PE, DEC, Huron, SD
Kevin Banken, Centrol, Brookings, SD
Moody County Commissioners
Brookings County Commissioners
Luke Muller, F.D.A.L.G., Watertown, SD
Randy Hukriede, MPCA, 504 Fairgrounds Rd., Suite 200, Marshall, MN 56258
Pete Doyscher, Lincoln County, County Feedlot Officer, 221 N Wallace Avenue, P.O. Box 66, Ivanhoe, MN 56142
Kyle Krier, Pipestone County, County Feedlot Officer, 119 2nd Avenue SW, Suite 13, Pipestone, MN 56164

enclosures: Construction Schedule Postcard
Notice of Completion Form

REQUIREMENTS

The following requirements must be implemented before we will issue an amended Certificate of Compliance and grant amended coverage under the 2017 state general permit. Failure to implement these requirements will invalidate this approval.

Plans & Specifications

The plans and specifications review is to determine whether seepage, storage, and other design requirements will be met.

1. **Property Easements**

   Several easements were included with your submittal, however, Golden Dakota Farms, LLC must obtain a signed easement from the landowners for all property not owned by Golden Dakota Farms, LLC where the proposed underground irrigation pipeline will be located. The easements shall grant Golden Dakota Farms, LLC access for installation, operation, and maintenance of the manure transfer pipeline. We recommend the easement also grant Golden Dakota Farms, LLC continued access to the underground irrigation pipeline in the event of any changes in ownership of the land where the piping is located. If this provision is not included in the easement, Golden Dakota Farms, LLC may not be able to continue using the underground irrigation pipeline unless a signed easement is obtained from the new property owner and submitted to the department. We recommend you consult with your attorney on the preparation of any easement and whether to record any easement with each county. **Please submit signed copies of any remaining easements to the department.**

2. **Underground Irrigation Pipe Testing Results**

   The proposed 10-inch PVC and existing 8-inch PVC underground piping must be pressure tested according to the submitted specifications. The pipe leakage testing results for the proposed and existing pipelines must be submitted to the department for review and approval. **Your engineer must submit the pipe leakage testing results to the department with the Notice of Completion.**

3. **Piping Profile**

   A piping profile was not included with the submitted plans. The proposed underground irrigation pipeline is to be buried a minimum of 6 feet. **Your engineer must submit an as-built piping profile to the department for review and approval.**

4. **Waterline or Stream Crossings**

   The submitted plans include a detail for any waterline or stream crossings. **The site map for the pipeline and the requested piping profile must identify the location of any waterline or stream crossing and must be submitted with the as-built plans to the department for review and approval.**

REQUIREMENTS CONTINUED

5. Detail for Well #5

The submitted plans do not include a detail for Well #5. The plans must be revised to include a detail for Well #5 which includes the location of the existing check valve and any valves that may be present. **Your engineer must submit as-built plans which include a detail for Well #5 to the department for review and approval.**

6. Proposed Valve near Well #3

Your engineer has indicated that you would prefer to eliminate the proposed valve at the end of Line #2 at the junction near Well #3 with the existing 8-inch PVC pipeline between Well #3 and Pivot #3. The irrigation distribution system will utilize a combination of existing and proposed pipelines with valves for each line at the proposed manifold and valves at each pivot. Based on the placement of existing and proposed valves, the proposed valve near the end of Line #2 may be eliminated. **If you decide to remove or change the location of this proposed valve, your engineer must submit as-builts to the department for review and approval.**

7. Modifications to Your Nutrient Management Plan (NMP)

The proposed underground irrigation pipeline will be used to transport wastewater from your existing pond system to existing pivots located within *Fields 46, 47-A, 47-B, 48-A, and 48-B* for irrigation purposes. The field maps for these fields must be revised to identify the area beneath each of the pivots as a separate field. Depending on how the fields are separated, your initial SD-CPA-63 nutrient management planning spreadsheet, will need to be updated to incorporate the changes from the field modifications. **Your engineer or crop consultant will need to submit a revised NMP for department review and approval, and an updated Notice of Intent will need to be submitted if there will be any modifications to the available acres identified in your existing NMP.**

8. Setback Distance and Water Wells

The manure management system and the application sites must be located at least 100 feet from a private well owned by you if the top of the aquifer is 100 feet or more below the land surface, 150 feet from a private well owned by you if the top of the aquifer is less than 100 feet below the land surface, 250 feet from a private well not owned by you and 1,000 feet from any public supply well. These areas cannot be included in the land application areas.

9. Other Permits That Will or May Be Required

Storm Water Permit - If construction will disturb more than one acre in total land area, **you must obtain a general storm water construction permit.** This permit must be obtained before you can start constructing your proposed underground irrigation pipeline. Information concerning this permit can be obtained by calling the Surface Water Quality Program at 1-800-737-8676. **A copy of this plan must be kept on-site during construction for review by DENR inspectors.**