

**May 19, 2022 BOARD OF ADJUSTMENT/ PLANNING COMMISSION
DEUEL COUNTY
STAFF REPORT**

Thursday – May 19, 2022 – 6:30 p.m.

DEUEL COUNTY BOARD OF ADJUSTMENT

ITEM #1 VARIANCE

Applicant/Owner: Global Dairy LP

Property Description: property previously described as SW1/4 Less Shannon Addition & Less Arieian & Sherman Addition to be known upon new plat as Global Dairy Second Addition in S1/2NW1/4, SW1/4 & SE1/4 of Section 21-113-50, Grange Township, Deuel County, South Dakota.

Action Item – to Section 1304.06 CAFO Requirements Setback and Separation Distance

Zoning Designation: AG - Agricultural

Request: The applicant requesting to expand their Class “A” Concentrated Animal Feeding Operation with less than 2,640’ from the established residences.

History/Issue(s):

1. Global Dairy LP, is requesting to expand their Class “A” Concentrated Animal Feeding Operation with less than 2,640’ from the established residences.
2. The proposed expansion of the CAFOe will be located within the 2640 feet east of Ben Markham, approximately 520 feet from the Shannon Houselog (co-owner) and within the 2640 feet west of David Nystrom property (that has a mobile home on it, which isn’t David’s primary residence).
3. The County requires a waiver or a letter construct a Class A CAFO within one-half mile of an existing residence:
 - a. Ben Markham, Shannon Houselog and David Nystrom have provided a letter that they are willing to waive the setback requirements and give permission to expand the existing facility (CAFO) on the proposed location that is within ½ mile of the residence.
 - b. The Board has a history of granting variances where the neighbors sign the waiver or a letter.
4. As of the date of this report staff has received no correspondence regarding this request:

Staff recommendation:

Variance Permit: Dwelling less than ½ mile from expansion of existing CAFO since the affect residences have signed a letter waiving the setback requirements and give permission for the expansion. The Board may postpone the request, deny the request or approve the request

ITEM #2 SPECIAL EXCEPTION

Applicant/Owner: Global Dairy LP

Property Description: property previously described as SW1/4 Less Shannon Addition & Less Arieian & Sherman Addition to be known upon new plat as Global Dairy Second Addition in S1/2NW1/4, SW1/4 & SE1/4 of Section 21-113-50, Grange Township, Deuel County, South Dakota.

Action Items – Special Exceptions ((Section 1101.03 (8)) Article XIII - (Section 1300) – Concentrated Animal Feeding Operation Regulations

Zoning Designation: AG – Agricultural

Request: To apply for Special Exception Permit expand their Class “A” Concentrated Animal Feeding Operation (CAFO from 7,486 animal units to 11,832 animal units which is 5,980 mature cattle (5,200 milking plus 780 dry cows), 680 calves & 2,600 heifers) which is a dairy facility in the Ag District

History/Issue(s):

Specifics of Request

Specifics of Request:

1. The Global LP is seeking to expand their Class “A” Concentrated Animal Feeding Operation (CAFO from 7,486 animal units to 11,832 animal units which is 5,980 mature cattle (5,200 milking plus 780 dry cows), 680 calves & 2,600 heifers) which is a dairy facility in the Ag District.
 - a. This proposed site at property previously described as SW1/4 Less Shannon Addition & Less Arieian & Sherman Addition to be known upon new plat as Global Dairy Second Addition in S1/2NW1/4, SW1/4 & SE1/4 of Section 21-113-50, Grange Township, Deuel County, South Dakota; they have applied for a variance to have the expansion of the existing CAFO within 1/2 mile setback for a Class A CAFO from any existing residences.
 - b. Manure management was provided by Dakota Environmental.
 - c. Feed sources/storage and nutrient management provided by Dakota Environmental.
2. Soil borings performed in the past indicated that some of the soils in the expansion have glacial till soils and that the aquifer is not present at the extent of the site.
3. The new proposed components are not located in the FEMA floodplain
4. The improvements consist of:
 - a. Construction of freestall barn addition to the Sherman barn, addition to calf barn, proposed parlor to the main (1st) existing freestall barn, freestall addition to the east freestall barn, new settling pond the northwest, combination of settling ponds 1 & 2 and new proposed feed storage area to the north of existing feed storage area.
 - b. Digester System, proposed separator building, covered pond and parking area to the north of the CAFO.
5. Most common haul route for the CAFO includes Highway 28 to the south. This road is maintained by SD DOT. They have other haul roads for transportation of feed and manure and they are mostly maintained by Grange Township.

Ordinance regarding this request:

1. The applicant will be submitting engineering and nutrient management plan to Deuel County for review decision of this Board.
2. The Board shall consider the following in determining whether the proposed CAFO will create a significant contribution of pollution:
 - a. Size of feeding operation and amount of manure reaching waters of the state
 - i. Historically the Board has relied in determination of SDANR in reference to this question since waters of the state are under their jurisdiction.
 - ii. Historically the Board has relied in determination of SDDANR in reference to this question since waters of the state are under their jurisdiction and this is a component of the State General Permit review.
3. A nutrient management plan is required.
 - a. Nutrient management plan has been prepared by a licensed Agronomist and submitted.
 - b. Fields in the nutrient management plan are expected to change (per the applicant and based upon the zoning ordinance.)
 - c. The agronomist certifies that the land currently used for spreading is sufficient for spreading the manure generated.
4. A manure management plan is required
 - a. The applicant’s agronomist and engineer prepared the manure management plan. It included:
 - i. A site plan
 - ii. Operation procedures and maintenance of manure facilities for proposed facility.

- iii. Final as-built plans will be submitted to the zoning officer following review by Deuel County Board of Adjustment.
 - iv. Plans specify records on manure application will be kept and document that acceptable manure and nutrient management practices have been followed.
5. A Management plan for fly and odor control.
 - a. Completed –
 - i. Operational plans for manure collection storage, treatment are expected to be updated and implemented
 - ii. Applicants and family members will remove mortalities from the site to a new location for composting.
 - iii. No new trees are proposed with the new facilities however, there is adequate space for shelterbelt plantings.
 - iv. The proposed modifications including the elimination of the sand settling lane will eliminate the odor production from the exposure of constantly flowing wastewater.
 - v. It is the intent to avoid spreading manure on weekends, holidays, and evenings on warm days.
 - vi. It is the intent to avoid spreading on calm and humid days.
6. The site is greater than suggested separation distances for Churches, Businesses, Commercially Zoned Areas, Town Districts, Incorporated Municipalities, other than the operator, and lakes and streams classified as fisheries.
7. Setbacks for this CAFO that is being applied as Class A setback. The proposed CAFO is located more than 1/2 of a mile from the existing residences with a variance and a letter from the residences.
8. The proposed facilities meet the minimum setbacks from rights-of-way.
9. Review of Specifications and nutrient management plan by Deuel County Board of Adjustment.
 - a. Applicant is required to keep and maintain records of fields to receive manure, utilize adequate acres for the spreading of manure in accordance with state general permit standards, and adhere to minimum manure application setbacks.
10. The zoning office received a concern about the expansion of Global Dairy LP.
 - a. 5-9-22 an email from Jim Roelofs, land owner one mile south, has concerns about the risk of manure spill and pollution of creek (Pea Munky Run).
 - b. he request to in included ongoing water quality testing of the creek, as one of the provisions of granting the extension of the Special Exception.
11. All information required of the applicant in Section 1302 were provided.
12. Information on soils, shallow aquifers, wellhead protection areas and floodplain (provided)
13. Staff notified Paul Nikoals SD DOT, in charge of maintenance of Hwy 28 maintenance.
14. Staff notified Grange Township, in charge of maintenance of other haul roads maintenance.
15. Staff notified Brookings-Deuel Rural Water of the request. (Rural Water Supplier.)
16. Staff notified SDDENR, East Dakota Water Development District, and Sioux Rural Water of the request
17. The zoning office notified owners of property within two-miles of the site.

Staff Recommendation

Special Exception: The board, utilizing one motion could approve, deny or table the special exception request. If approved the Board may use the following findings:

- No complaints or objection were received from the affected neighbor.

The Board determined that it is empowered under the section of the ordinance described in the application to grant the special exception and that granting the special exception will not adversely affect the public interest. Please see Findings of Fact and Conclusions of Law on file with this application.

ITEM #3 SPECIAL EXCEPTION

Applicant: Brookings Biogas LLC
Owner: Global Dairy LP

Property Description: Global Dairy Second Addition in SW1/2 of the NW1/4, SW1/4 & SE1/4 of Section 21-113-50, Grange Township, Lake Cochrane, Deuel County, South Dakota

Action Items – Special Exception – (Section 1101.03.12 – Essential Services)

Zoning Designation: A – Agricultural District

Request: Applicant/Owner requesting a Special Exception requesting to construct a biogas upgrade and interconnection system to Northwestern Gas Pipeline network for biogas from anerobic digesters at Global, Hammink, and Northern Sky Dairies in AG District.

History/Issue(s):

Specifics of Request

1. Brookings Biogas LLC is requesting to construct a biogas upgrade and interconnection system to Northwestern Gas Pipeline network for biogas from anerobic digesters at Global, Hammink, and Northern Sky Dairies in AG District.

- a) Currently they are working with 9 dairies to build 8 separate digesters which we have in “clusters” including sites in Moody, Brookings, Deuel and Grant counties. These clusters also include gas upgrader systems for the biogas generated by the digesters in the cluster and gas interconnect points where the biogas is transitioned to gas companies, such as NorthWestern Energy in this case, where they inject the renewable natural gas (RNG) into their gas network.
- b) The gas generated from those digesters will be collected via gas line which will be installed in road ROW's following all applicable State and PUC requirements.
- c) All biogas will be delivered to the Global Dairy site to a central Upgrader system which will finish turning the biogas in to pipeline quality RNG. The RNG will then go through a quality control process where it then becomes the property of NorthWestern Energy to finish the process of injecting it into their system.
- d) A gas offloading system will also be developed at Global Dairy for the delivery of additional biogas which will be trucked from 2 other dairies, Lakeside and Blooming Valley, located in Grant County. This offloading station will allow for the potential of gas from other digesters to be added in the future. We recently started working with Wildrose Dairy in hopes of being able to include a digester for them within this cluster as well.
- e) While we are requesting the SEP for approval of the Upgrader, Offloading, and Metering stations as provided in the site plan, NorthWestern Energy will also be requesting an additional SEP at a later time. Their request will outline their plans for delivering the RNG from their Metering site to approximately 1.5 miles east at their existing gas line system where the injection will take place. They are currently working on those design details.
- f) Necessary permitting with multiple agencies such as SD DANR, the PUC, and US Corp is already in various stages of approval as well. We have also notified the impacted townships (Grange Township in Deuel) about our plans for the installation of the gas lines in the ROW, all of which will be bored under roads or driveways so to cause minimal disruption anywhere along the route.

2. Deuel County Ordinance requires that a land owner go through the Special Exception Process to have storage in the “AG” District.

Ordinance and Comprehensive Land Use Plan regarding this request:

1. Essential services is listed use in the A – Agricultural District.
12. Essential services – Overhead or underground electrical, gas, steam or water transmission or distribution systems and structures, or collection, communication, supply or disposal systems and structures used by public for protection of the public health, safety or general welfare, including towers, poles, wires, mains drains, sewers, pipes, conduits, cables satellite dishes, and accessories in connection therewith. The Board attached the specific condition in accordance with its ability to add conditions to a conditional use permit.

2. The Deuel County Comprehensive Land Use Plan states that the main goal is to accommodate growth and to minimize the disturbance of agricultural land.
 - o This lot has an existing access off SD HWY 28;
 - o They have efficient Off-street parking; 3-4 Employees on site and ample room for parking
 - o They have efficient utilities – Garage service and a dumpster;
 - o They have efficient Screening and Buffering; 6'-8' chain link fence around various areas of the sites;
 - o They are will be having any Signs; signage being located on the entrance gates to the different areas; commercial grade directional lights for each area
 - o They have have efficient yard space and other open space;

Staff Summary

Conditional Use Permit – Essential Services: The application may be approved, postponed, or denied.

Staff recommendation:

Approval would be based on the applicant's ability to meet the requirements for a special exception described in ordinance - To grant the Special Exception to construct and operated a biogas upgrade and interconnection system to Northwestern Gas Pipeline network for biogas from anerobic digesters at Global, Hammink, and Northern Sky Dairies in AG District.

The Board determined that it is empowered under the section of the ordinance described in the application to grant the special exception and that granting the special exception will not adversely affect the public interest. Please see Findings of Fact and Conclusions of Law on file with this application.