UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION VII (EPA)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

STATEMENT OF BASIS *(DRAFT)*

June 25, 2020

Permittee: **Bruns Feedlot, LLC**
1172 I Avenue
Pender, NE 68047

NPDES Permit No.: NE0135399

Facility Location: NE¼ NW¼ and the N½ NE¼ Section 11, Township 25 N, Range 5 E
Latitude: 42.162947° N
Longitude: -96.808553° W
Thurston County, Nebraska

Facility Contact: Joel Bruns, Owner
1172 I Avenue
Pender, NE 68047
Phone (402) 922-0112

A. Status of Permit

This Statement of Basis supports EPA's draft NPDES Permit No. NE0135399 for the livestock feeding facility owned by Leon Bruns, which is located within the Omaha Tribe of Nebraska Indian Reservation, about 7 miles northwest of Pender in Thurston County, Nebraska. The facility's Standard Industrial Code is 0211 - Beef Cattle Feedlots.

This is a reissuance of a NPDES permit for this facility by the EPA. A permit application for this facility was received on March 27, 2020.

B. Background

Bruns Feedlot, LLC is located within the exterior boundaries of the Omaha Tribe of Nebraska Indian Reservation. EPA has sole authority to issue NPDES permits under Section 402 of the Clean Water Act, 33 U.S.C. §1342, to Concentrated Animal Feeding Operations (CAFOs) located within the exterior boundaries of the Omaha Tribe of Nebraska Indian Reservation.

The EPA has prepared this Statement of Basis and the permit for Bruns Feedlot, LLC using information in the permit application signed March 27, 2020, and information from other sources, all as identified within this Statement of Basis and included in the Administrative Record.

C. Description of Facility

Bruns Feedlot, LLC is a Concentrated Animal Feeding Operation with approximately **52.2** acres of open lot pens that are used for the feeding of up to **4,000** head of beef cattle. Runoff from the open lot pens and approximately **10.2** acres of other contributing drainage area is directed to a runoff holding pond. The runoff holding pond has a maximum operating level of approximately **42 acre feet or 13,716,584 gallons**. Solid manure scrapped from the pens, solids

removed from the debris basins, and the contents of the holding pond are to be applied to the land application areas in accordance with the CAFO's approved Nutrient Management Plan ("NMP"). Bruns Feedlot, LLC has **558 acres** available for manure application, but may also transfer manure to other recipients in any given year.

D. Discharge Prohibition

Discharge is prohibited except when precipitation in excess of a 25-year, 24-hour rainfall event causes an overflow from a properly designed, constructed, operated, and maintained runoff control system. Proper design, construction, operation, and maintenance are specified in the permit and the required nutrient management plan. These requirements are based on the NPDES permit program regulations found at 40 CFR Part 122 and the Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations found at 40 CFR Part 412.

E. Receiving Waters

If an overflow were to occur, the receiving water from the runoff control system, is an unnamed tributary of Logan Creek, which is within the Omaha Tribe of Nebraska Indian Reservation. The unnamed tributary flows northeast about 2 miles from the CAFO before reaching Logan Creek. The Nebraska Department of Environment and Energy (NDEE) has included Logan Creek on their *2018 Water Quality Integrated Report* 303(d) list as impaired for *E. coli* (Segment EL2-20000) of Logan Creek, which is considered state waters for those portions upstream and downstream of the Indian Reservation(s) that it traverses, but within the boundary of the Reservation, the stream is considered Indian Country waters.

F. Proposed Effluent Limits

The permit contains technology-based permit limitations that prohibit discharges except overflows caused by precipitation in excess of 25-year, 24-hour rainfall events; and then, only if the other requirements of the permit have been followed. There have been no reported discharges from the CAFO during the previous 5 years. Compliance with the limitations for the production and land application areas, which include: 1) best management practices, and 2) the development and implementation of a nutrient management plan, will assure that the CAFO achieves the basic "no discharge" requirement. The technology-based limitations of "no discharge" are protective of water quality in the receiving stream if the holding pond is designed and operated as required by the draft permit and will seldom, if ever, discharge. Even though Logan Creek has been included on the NDEE 303(d) list as impaired for *E. coli*, the permit does not contain any specific conditions or monitoring requirements for *E. coli* because the Effluent Limitations Guidelines and Standards for CAFOs, 40 CFR Part 412, as required in the permit, prohibits almost all discharges of pollutants from the CAFO.

Technology-based Effluent Limitations

The CAFO is subject to the provisions of 40 CFR Part 412 - Concentrated Animal Feeding Operations (CAFO) Point Source Category, Subpart C - Dairy Cows and Cattle Other than Veal Calves, Effluent Limitations Guidelines (ELG). This subpart of the ELG applies to CAFOs with at least 1,000 cattle.

Production Area

The ELG does not allow discharges of manure, litter, or process wastewater pollutants from the production area to waters of the United States, except when precipitation causes an overflow from a facility where the production area is:

- Designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event [40 CFR § 412.31(a)(1)(i)], and
- Operated in accordance with the additional measures (visual inspections, depth marker, corrective actions, mortality handling, and record keeping requirements) for the production area required by 40 CFR § 412.37(a) and (b) and 40 CFR § 412.31 (a)(1)(ii).

Land Application Area

In accordance the NPDES regulations and ELGs, the permit incorporates the approved site-specific nutrient management plan.

- The nutrient management plan (NMP) contains the maximum amount of nitrogen and/or phosphorus, based on the field-specific phosphorus risk assessment, soil test results, nutrient credits, manure and wastewater analysis, and crop need and sequence. [40 CFR § 412.4 (c)]
- The NMP addresses best management practices (BMPs) such as land application setback requirements, development of a field-specific assessment that determines the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters. [40 CFR § 412.4 (c)(2)]
- The NMP meets the 9 minimum measures that are specified in 40 CFR § 122.42 (e)(1).
- The NMP is also in compliance with the Natural Resources Conservation Service (NRCS), Conservation Practice Standard, Nutrient Management, Code 590 for nutrient management. [40 CFR § 412.4 (c)(2)]

Best Management Practices

The NPDES permit regulations authorize best management practices (BMPs) to be included in permits when BMPs are reasonably necessary to meet technology-based effluent limitations in 40 CFR § 122.44 (k). Part I. B. of the permit contains BMPs that are necessary in order to achieve the basic "no discharge" requirement for the production area. These BMPs address: 1) adequate storage capacity for the holding pond, 2) adequate pumping system capacity for the irrigation system, and 3) dewatering of the holding pond. Dewatering of the holding pond, with an adequately sized pump, is necessary in order to operate and maintain the system to contain the runoff and direct precipitation from the 25-year, 24-hour storm event as required by the ELGs at 40 CFR § 412.31.

G. Antidegradation Statement

The CAFO is an existing operation. Due to the "no discharge" technology-based requirements in the permit, the limitations and conditions in the permit are protective of the Clean Water Act §101(a)(2) goals. The existing uses and quality of water in the receiving stream as well as the

downstream state water bodies should not be lowered because compliance with the permit limits and best management practices are designed to prevent discharges other than those when precipitation in excess of a 25-year, 24-hour rainfall event causes an overflow from a properly designed, constructed, operated, and maintained runoff control system. The permit also requires the diversion of clean water, as appropriate, from the production area.

A specific study of the existing uses and quality of the receiving stream was not necessary and was not conducted based on other information available to EPA that included a November 5, 2003 Point Source Stream Evaluation conducted by the EPA Region 7's Environmental Services Division. The results of the evaluation indicate that Logan Creek, the receiving stream for the discharge addressed by the permit, likely has habitat for aquatic life since the average stream depth recorded was 0.32 meters. At the time of the evaluation, recreational activities were not observed; however, since the stream is in close proximity to the Village of Pender, recreational use is highly likely. A site visit of the Pender Wastewater Treatment Facility that discharges to Logan Creek was conducted on March 8, 2017 by EPA Region 7's Wastewater Infrastructure Management Branch that confirms the findings in the Point Source Stream Evaluation conducted on November 5, 2003.

The Nebraska Department of Environment and Energy (NDEE) includes Logan Creek (Segment EL2-20000) on their *2018 Water Quality Integrated Report* that describes the status and trends of existing water quality, the extent to which designated uses are supported, pollution problems and sources, and the effectiveness of the water pollution control programs.

H. Inspection and Record Keeping Requirements

The permit requires that the Permittee perform visual inspections of the production area on a regular basis and keep records that document those inspections. The as-built design and drawings of the holding pond and any overflows from the pond must also be kept. [40 CFR § 412.37 (a) and (b)]

Records that document land application practices are required to be kept. They include such items as test methods and test results for manure, process wastewater, and soil; the amount of nitrogen and phosphorus applied to each field and the date of application; and the results of a phosphorus risk assessment for each field. [40 CFR § 412.37 (c)]

I. Endangered Species Act

EPA and the U.S. Fish and Wildlife Service (Service) have signed a Memorandum of Agreement (EPA-823-F-01-002, January 2001) to work together to improve the implementation of the Endangered Species Act (ESA) and the CWA as they relate to NPDES permit actions.

The Service has a website which shows listed species by county. For Thurston County, the threatened species are the western prairie fringed orchid and northern long-eared bat. The endangered species is the pallid sturgeon that is known to occur in the Missouri River.

The Nebraska Game and Parks Commission (NGPC) published a document entitled "Estimated Current Ranges of Threatened and Endangered Species: List of Species by County, Nebraska Natural Heritage Program, Nebraska Game and Parks Commission, Version: December 2017". For Thurston County, the state listed endangered species in the above referenced NGPC document are the pallid sturgeon and sturgeon chub; and the threatened species are the American

ginseng, lake sturgeon, northern long-eared bat, and river otter. The sicklefin chub is proposed as a state listed endangered species.

NDEE Title 117 - *Nebraska Surface Water Quality Standards*, Chapter 5, designates Logan Creek, Segment EL2-20000, with the following key species: bluntnose minnow, flathead chub, yellow sandshell, and channel catfish as sensitive species.

The permit is for an existing CAFO and will authorize permitted activities. There will be no new construction or disturbance of land, and thus there will be no negative impact on the environment, aquatic life, or wildlife species.

J. Certification of CWA Section 401 Compliance

The Director of the EPA Region 7 Water Division will have the opportunity to address any comments received during the public comment period prior to signing the Water Quality Certification statement for the facility.

K. Permit Duration

The permit will be issued for a period of five years with the permit expiration date being determined at the time of permit issuance.

L. Procedures for Final Decision Making on the Proposed Permit

The comment period for the Public Notice (PN) of the permit starts with the date noted on the PN and ends 30 calendar days later. The PN requests comments from interested individuals, agencies, or organizations. A written request for a public hearing on the permit may also be submitted. Any request for a hearing must state the nature of the issues that the requestor proposes to raise at the hearing. In accordance with 40 CFR § 124.17, EPA will respond to all significant comments that are submitted before the end of the 30-day public comment period. If there is a significant amount of interest expressed during the 30-day public comment period, a public hearing will be held on the contents of the permit. The final permit will be issued in accordance with the provisions of 40 CFR § 124.15. (Regulations pertaining to the public notice and issuance of NPDES permits are included in the Administrative Record.)

M. EPA Contact for Additional Information

For additional information regarding the permit and the administrative process for making a final determination regarding issuance of the permit, please contact:

U.S. Environmental Protection Agency, Region 7
Attention: Mark Matthews
WD/PALB
11201 Renner Boulevard
Lenexa, Kansas 66219

Phone: **(913) 551-7635 or 1-800-223-0425**
Fax: **(913) 551-7884**
E-mail: **matthews.mark@epa.gov**