STATEMENT OF BASIS

PERMIT TYPE: NPDES General Permit for Concentrated Animal Feeding Operations

PERMIT NUMBER: SDGN-10000

The cover page of the general permit will be replaced with a copy containing the assigned permit number and will indicate the permit is a federally enforceable National Pollutant Discharge Elimination System (NPDES) permit once coverage is authorized.

Purpose of Statement of Basis

The Administrative Rules of South Dakota (ARSD), Chapter 74:52:05:07, require that a Statement of Basis be prepared for each surface water discharge permit. The Statement of Basis briefly sets forth the principal facts in preparing the proposed permit.

Permit Description

This general permit contains discharge requirements and limits that are based on technology and water quality considerations, prohibitions, best management practices, and other conditions applicable to the types of wastewater generated at concentrated animal feeding operations (CAFO) and processing operations.

Background

South Dakota Codified Law (SDCL) 34A-2-112 gives the Secretary authority to issue a general permit. ARSD 74:52:02:46 outlines the requirements that must be met in order to issue a general permit. The sources to be covered under a general permit must meet the following requirements:

1. Involve the same or substantially similar types of operations;
2. Discharge the same types of wastes;
3. Require the same effluent limitation or operating conditions;
4. Require the same or similar monitoring; and
5. In the opinion of the Secretary, be more appropriately controlled under a general permit.

CAFOs and processing operations meet all of these requirements and, therefore, a general permit is appropriate for these operations.

Definitions

“Agricultural Stormwater Discharge” means a precipitation related discharge of manure, litter, or process wastewater from a CAFO’s land application fields where the manure, litter, or process wastewater has been applied in accordance with the CAFO’s approved nutrient management plan (NMP) designed to ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater (ARSD 74:52:02:22 adopted by reference (a.b.r.) 40 Code of Federal Regulations (CFR) 122.23(e)).

An “Animal Feeding Operation” (AFO) is a lot or facility that stables, confines, and feeds or maintains livestock in either an open or housed lot for a total of 45 days or more in any 12-month period. The open lot does not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season over any portion of the lot or facility. Two or more AFOs under common ownership are a single AFO if they adjoin each other (within one mile), or if they use a common area or system for the disposal of manure.

A “Concentrated Animal Feeding Operation” (CAFO) is an animal feeding operation that meets the following criteria for a large, medium, or small CAFO:

1. A large CAFO as described in Table 1, below.
2. A medium CAFO as described in Table 1, below, and meets one of the following conditions: 1)
    a. Pollutants are discharged into waters of the state through a man-made ditch, flushing system, or other similar man-made device; or
    b. Pollutants are discharged directly into waters of the state which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
3. A small CAFO as described in Table 1 and designated as a CAFO by the Secretary considering the following factors:
    a. The size of the AFO and the amount of manure or process wastewater reaching waters of the state;
    b. The location of the AFO in relation to waters of the state;
    c. The means of conveyance of manure and process wastewater into waters of the state; and
    d. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of manure and process wastewater into waters of the state.

Table 1. Number of animals to define large, medium, and small CAFOs.

Type of Animal Feeding Operation	CAFO		
	Large Animal numbers equal to or more than:	Medium Animal numbers equal to:	Small Animal numbers less than:
Dairy cows (mature – milked or dry) [1]	700	200 to 699	200
Veal Calves[1]	1,000	300 to 999	300
Cattle other than mature dairy cows or veal calves[1, 2]	1,000	300 to 999	300
Swine (weighing more than 55 pounds) [1]	2,500	750 to 2,499	750
Swine (weighing less than 55 pounds) [1]	10,000	3,000 to 9,999	3,000
Horses[1]	500	150 to 499	150
Sheep or Lambs[1]	10,000	3,000 to 9,999	3,000
Turkeys	55,000	16,500 to 54,999	16,500
Laying hens or broilers[3]	30,000	9,000 to 29,999	9,000
Chickens, other than laying hens[4]	125,000	37,500 to 124,999	37,500
Laying hens[4]	82,000	25,000 to 81,999	25,000
Ducks[3]	5,000	1,500 to 4,999	1,500
Ducks[4]	30,000	10,000 to 29,999	10,000
Geese	30,000	10,000 to 29,999	10,000

[1] Animals are counted individually once separated from the mother.
[2] Cattle includes but is not limited to heifers, steers, and bulls.
[3] AFO uses a liquid manure handling system.
[4] AFO uses other than a liquid manure handling system.
NOTE: Other animal types not listed in the above table may be considered on a case-by-case basis.

A "Processing Operation" is an operation that processes or stores manure, or processes or stores process wastewater, without coverage under a CAFO's general or individual water pollution control permit, and the maximum number of permitted or unpermitted animals from which manure or process wastewater is processed or stored meets the definition of a large CAFO.

General Permit Website Links

Due to the likelihood that website addresses for electronic references identified in the permit will change during the term of the permit, links to these websites were not included in the permit. The Livestock Services Program created a reference document with website links that is available on the Department of Agriculture and Natural Resources' (DANR's) website. References are identified by item number in the order they occur within the permit. Website links contained in the document will only be updated to direct users to the same item referenced in the permit. Updating the reference document will allow producers to find the referenced documents throughout the life of the permit and will be easier than updating the permit. However, if the website links were included in the permit, any link updates to the same item would be a minor modification.

Operations Required to Obtain Permit Coverage

An AFO (see permit definition) or an operation that processes or stores manure or processes or stores process wastewater is subject to this permit if one or more of the following criteria are met:

1. It is a CAFO (see permit definition and SDCL 34A-2-36.2);
2. It is a processing operation (see permit definition and SDCL 34A-2-36.3);

3. A local level of government, such as a county commission or planning and zoning committee, requires permit coverage;
4. It is a large CAFO located in another state or in Indian Country that stockpiles or land applies un-manipulated manure or process wastewater on land under the jurisdiction of South Dakota;
5. The operation is an animal feeding operation voluntarily requesting permit coverage; or
6. The Secretary designates the animal feeding operation as a CAFO.

Any processing operation without approval or coverage under a CAFO's general or individual water pollution control permit shall obtain coverage under this permit following the schedule provided by the Secretary. Permit applications for those operations that have existing containment structures shall be in accordance with Section 1.2.2.2. except that the criteria used to determine what needs to be submitted for the plans and specifications element of the application will be determined by whether the processing operation received prior DANR approval.

How to Obtain Permit Coverage

The permit includes application requirements for existing operations with an approved permit application or permit coverage prior to the effective date of the permit; permitted operations making a major modification to their operation; permitted operations that will have a change in producer; existing operations without a DANR approved manure management system; existing operations required to obtain permit coverage; and new operations. The permit includes minimum location standards the producer shall consider when selecting a site for a new CAFO. The general elements of a permit application are a Certification of Applicant form, a Notice of Intent form, engineering plans and specifications for the manure management system, and an NMP.

In addition to the Certification of Applicant form, the permit requires applicants that are representing a corporation, partnership, limited liability partnership (LLP), limited liability corporation (LLC), or trust to provide information on their legal structure including any parent corporation or subsidiary corporations of the applicant. The applicant shall also identify the name, title/position, and residential address (a P.O. Box is not acceptable) of every officer, general partner, LLP partner, LLC member, trustee, investor, director, or person performing a function similar to a director; the applicant, and each person who is the recorded or beneficial owner of 10 percent or more of any class of voting stock of the applicant, or any other responsible official(s) of the applicant with legal or decision making responsibility or authority for the operation. This requirement has been included in the permit so the Secretary can verify SDCL 1-40-27 will be met prior to issuing permit coverage.

The permit includes a section that describes permit application processing. In response to a 2011 U.S. Court of Appeals for the Fifth Circuit decision in *National Pork Producers Council v. EPA*, which vacated portions of the Agency's 2008 CAFO rule, the U.S Environmental Protection Agency (EPA) issued a regulation on July 19, 2012, that only requires NPDES permits for CAFOs that discharge. SDCL 34A-2-36.2 requires all CAFOs to operate under a general or individual water pollution control permit. Because of this difference, the 2017 general permit gave CAFOs the option of applying for a state or NPDES permit. As of January 1, 2021, SDCL 34-A-2-36 set a permit term of ten years for CAFOs not required to obtain NPDES permit coverage. Due to this change, it was necessary to create separate state and NPDES permits. An NPDES permit is issued using the Secretary's authority in SDCL 34A-2, ARSD 74:52, and the authority to issue NPDES permits granted to the Secretary by the U.S. EPA on December 30, 1993. The producer must

indicate whether they are applying for a state or NPDES permit on the Notice of Intent form submitted as part of their application.

Table 2. Differences between state and NPDES permit conditions.

State Permit Conditions	NPDES Permit Conditions
Permit term is 10 years.	Permit term is 5 years.
Any discharge from an operation's manure management system is a permit violation.	Certain operations are allowed to have a discharge from their manure containment system in the event of a 25-year, 24-hour storm event if the manure management system is properly designed, constructed, operated, and maintained.
Operations that process or store manure, or process or store process wastewater may obtain coverage under a CAFO's general water pollution control permit as part of the CAFO's manure management system for manure, litter, or process wastewater generated by the CAFO.	Operations that process or store manure, or process or store process wastewater may obtain coverage under a CAFO's general or individual water pollution control permit. Processing operations without coverage under a CAFO's permit must obtain general or individual NPDES permit coverage.
Applications for new operations or for those increasing their animal numbers are public noticed in a local paper and on DANR's Public Notice website with a 30-day comment period. DANR will respond to any comments received during the comment period. There is no opportunity for a contested case hearing on a permit application.	Applications for new operations or for those increasing their animal numbers are public noticed in a local paper with a 30-day comment period. Permitted operations with a Certificate of Compliance making major modifications (see permit definitions) without increasing their animal numbers are public noticed on DANR's Public Notice website for a 14-day comment period. DANR will respond to any comments received during the comment period. There is an opportunity for a contested case hearing on the Livestock Services Program's recommendation to issue or deny permit coverage.
Annual reports must include the same information as the 2017 state general permit annual reports.	Annual reports must include the same information required by the state permit plus the actual crop(s) planted and actual yield(s) for each field where manure, litter, or process wastewater was applied, copies of the results from manure, litter, process wastewater and soil sampling, copies of the calculations showing the total nitrogen and phosphorus (if required) to be applied to each field including the amount of any supplemental fertilizer applied during the previous 12 months for fields owned, rented, or leased by the producer.
Permit and reporting information will be maintained by the state.	Permit and reporting information will at some time be maintained in an U.S. EPA data system.
Final modeled result of the Natural Resources Conservation Service's Soil Plant Air Water model showing no overflows is required for operations with open lots or open manure containment systems.	Final modeled result of the Natural Resources Conservation Service's Soil Plant Air Water model showing no overflows is only required for new source swine, poultry, and veal operations with open manure containment systems.

NPDES Permit Application Processing:

1. Upon receipt, the Secretary shall review the permit application to make a preliminary determination whether it is complete and to verify it meets the requirements of this permit. The Secretary may request additional information if the application is incomplete or if additional information needs to be submitted to verify the requirements of the general permit will be met.
2. The Livestock Services Program's recommendation of approval, conditional approval, or denial of permit coverage shall be public noticed once in a newspaper in the general locality of the feeding operation and on DANR's Public Notice website (http://danr.sd.gov/public/default.aspx). The notice shall appear at least 30 days prior to the Secretary issuing final approval, conditional approval, or denial of the permit application. The producer shall be responsible for paying for the newspaper notice. The notice shall contain information on the feeding operation to include the location, number of animals, a brief description of the proposed manure management system, the legal description of the land in the NMP, the Livestock Services Program's recommendation, and where to obtain further information. The public notice shall include information on how to submit comments or request a contested case hearing. A request for a contested case hearing shall be in writing and shall be prepared and filed in accordance with ARSD 74:50:02:02.
3. The Livestock Services Program shall prepare a written response to all written comments received during this period and, if necessary, may require the producer to revise the permit application.
4. If a contested case hearing is requested, the Secretary shall schedule a contested case hearing.
5. The contested case hearing shall be public noticed once in a newspaper in the general locality of the feeding operation and on DANR's Public Notice website at least 30 days before the hearing.
6. If a contested case hearing is held, the Secretary shall issue a final decision based on the outcome of the hearing and issue permit coverage, issue permit coverage with conditions, or deny permit coverage. If permit coverage is granted at that time, the Secretary shall conditionally approve plans and specifications submitted as part of the permit application. It is a violation of this general permit if a producer does not follow the conditions of the Secretary's approval.
7. If no contested case hearing is requested, the Secretary shall conditionally approve or deny the operation's plans and specifications and grant or deny permit coverage. It is a violation of this general permit if a producer does not follow the conditions of the Secretary's approval.
8. Starting construction of the manure management system before receiving general permit coverage is a violation of this permit. If permit coverage is granted, the producer can begin any construction included as part of their permitted system. Once construction has commenced, the producer has three years to complete construction and submit a Notice of Completion. If construction has not started within two years of receiving permit coverage, or if construction has not been completed within three years following the start of construction, approval of the plans and specifications is expired and permit coverage is rescinded for any portion not completed. Operations that received an approval letter from the Secretary under the 2003 or 2017 general permit with approval that has not expired can proceed with construction of the manure management system as long as the operation will meet the requirements of this permit.

If additional documentation is needed to demonstrate the requirements of this permit will be met, it shall be submitted with revised plans or as-built plans with a Notice of Completion.

9. Livestock Services Program staff shall conduct a minimum of one construction inspection in accordance with ARSD 74:57:01:03.

10. Upon completion of construction, the producer shall submit to DANR the results of any required construction testing and a Notice of Completion (Appendix A) that has been completed by a South Dakota licensed professional engineer or, to the extent authorized by state law, prepared by the U.S. Department of Agriculture – Natural Resources Conservation Service (NRCS).

11. If all conditions of approval and permit conditions are met, the Secretary shall issue a Certificate of Compliance and the operation can begin using the manure management system in accordance with the conditions of this permit.

12. If at any time after a permit application is public noticed and before a Certificate of Compliance is granted, the producer's permit application is significantly changed; the application shall start the permitting process over. This includes a new public notice. Significant changes include:

    a. Any revised or as-built plans that include a change in location of the liquid containment structures where additional soil borings are required;

    b. A change to the type of containment structures; or

    c. A modification to the NMP resulting in a change in a planned crop rotation or an increase in land application field acres.

13. If after an operation receives a Certificate of Compliance, the producer plans to make a major modification to their operation, excluding an increase in animal numbers, the producer must submit a modified permit application. The Livestock Services Program's recommendation for approval, conditional approval, or denial shall only be public noticed on DANR's Public Notice website (http://danr.sd.gov/public/default.aspx) for 14 days. The notice shall contain information on the feeding operation to include the location, number of animals, a brief description of any proposed modifications to the manure management system or the NMP, and where to obtain further information. DANR shall respond to any comments submitted. A contested case hearing can be requested, but only addressing the modifications being proposed in the notice. The requirement for a 14 day public notice period only on DANR's website is included in the permit because many NMP changes, such as field additions, are requested in the Spring and Fall when producers may have a short time to land apply manure due to cropping practices and the weather. The U.S. EPA's 2012 CAFO regulations gave delegated states the authority to set the notice length and method for these types of changes.

14. If after an operation receives a Certificate of Compliance, the producer plans to have more animals present than the maximum number of animals listed on their Certificate of Compliance, the producer must submit a modified permit application. The Livestock Services Program's recommendation of approval, conditional approval, or denial of permit coverage shall be public noticed once in a newspaper in the general locality of the feeding operation and on DANR's Public Notice website (http://danr.sd.gov/public/default.aspx). The notice shall appear at least 30 days prior to the Secretary issuing final approval, conditional approval, or denial of the permit application. The notice shall contain information on the feeding operation to include the location, number of animals, a brief description of the proposed manure

management system, the legal description of the land in the NMP, the Livestock Services Program's recommendation, and where to obtain further information. The public notice shall include information on how to submit comments or request a contested case hearing. A request for a contested case hearing shall be in writing and shall be prepared and filed in accordance with ARSD 74:50:02:02. The requirement to public notice an increase in animal numbers has been a permit requirement since DANR's first general permit for concentrated swine feeding operations was issued in 1997 so is included in this permit.

Permit Termination and Closure Requirements

The permit contains permit termination and closure requirements to ensure that manure and process wastewater is properly land applied before permit coverage is terminated at operations that are closing. Where a change in the operation has eliminated the requirement for a permit, the permit sets operation and maintenance conditions required for permit termination.

Effluent Limits

Section 303(d) of the federal Clean Water Act requires states to develop Total Maximum Daily Loads (TMDLs) for waters at levels necessary to achieve and maintain water quality standards. TMDLs are calculations of the amount of pollution a waterbody can receive and still maintain applicable water quality standards. TMDLs are necessary for waters that do not meet or are not expected to meet water quality standards with the application of technology-based controls for point sources. TMDLs address specific waterbodies, segments of waterbodies, or even entire watersheds, and are pollutant specific. TMDLs must allow for seasonal variations and a margin of safety, which accounts for any lack of knowledge concerning the relationship between pollutant loads and water quality.

Facilities covered under this general permit have the potential to have an emergency discharge of wastewater to waters of the state with an established TMDL. However, this general permit does not allow a discharge except in accordance with Section 1.4.1. of the general permit. Therefore, it is not necessary to establish a wasteload allocation for these emergency discharges.

The following effluent limits apply to CAFOs subject to this permit. The limits are based on 40 CFR Part 412 a.b.r. in ARSD 74:52:10 and best professional judgement.

1. **New Source Swine, Poultry, and Veal Operations, and Other CAFOs with Covered Production Areas.** The producer shall have no discharge of manure, litter, process wastewater, or other organic by-products from the production area or containment structure(s) to waters of the state.
2. **CAFOs with Uncovered Manure Production Areas.** The producer shall have no discharge of manure, litter, process wastewater, or other organic by-products from the production area to waters of the state. The only time this permit allows a discharge of process wastewater to waters of the state is when precipitation causes a discharge from production area as long as:
    a. The manure management system is designed, constructed, operated and maintained at all times to contain all manure, litter, process wastewater, and other organic by-products including the runoff and direct precipitation from a 25-year 24-hour precipitation event and is in compliance with the terms and conditions set forth in this permit;
    b. A daily record of measurable rainfall events shall be recorded. The producer can use an on-site rain gauge to measure precipitation amounts. Measurements taken from the rain gauge

must be recorded to the nearest tenth ($^1/_{10}$) of an inch. Producers do not need to update their records on any day when there is no precipitation.

c. The producer has inspection records indicating the operation has been properly operated and maintained;

d. The discharge is the result of the precipitation event(s);

e. No feasible alternative to discharging existed;

f. Only manure or process wastewater in excess of the storage capacity of the wastewater containment system or necessary to prevent system failure is discharged to waters of the state; and

g. DANR is notified in accordance with the twenty-four hour reporting section of this permit, and the county emergency manager for the county where the operation is located is notified.

3. **Processing Operations.** The producer shall have no discharge of manure, litter, process wastewater, or other organic by-products to waters of the state.

Representative Monitoring

DANR's general permit contains representative monitoring requirements to protect surface waters and shallow aquifers.

ARSD 74:52:03:06 Monitoring Requirements and ARSD 74:52:03:26 Requirements for Monitoring set forth the permit requirements to ensure representative and accurate results. ARSD 74:52:03:06(5) requires that samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

Discharge Monitoring

The U.S. EPA's NPDES Permit Writers' Manual for Concentrated Animal Feeding Operations (2012), the DANR Reasonable Potential Implementation Procedure for SWD Permits (2013), ARSD 74:51 Surface Water Quality, and the proposed general permit conditions were reviewed. CAFOs with properly designed, constructed, operated, and maintained manure management systems covered by this general permit are not believed to have the reasonable potential to cause or contribute to an exceedance of the South Dakota Surface Water Quality Standards.

The U.S. Food and Drug Administration (FDA) Center for Veterinary Medicine regulates animal drugs under the Federal Food, Drug, and Cosmetic Act (FFDCA). Starting June 11, 2023, animal owners were required to have a veterinary prescription to purchase antibiotics. Antibiotics are purchased from a licensed pharmacy and are not available for purchase over the counter. Feed stores have to be licensed to accept prescriptions. No antibiotics are listed in the South Dakota Surface Water Quality Standards and no antibiotic monitoring is being required by this permit.

If a discharge of manure or process wastewater is found from the production area or from tile placed closer than 50 feet from the toe of the exterior berm of a holding pond or from around the foundation of a manure containment system and from storm water pump systems for covers on structures that process or store manure or process wastewater, the producer is required to collect and have a grab sample of the discharge analyzed. The producer is required to report the following information to DANR: date and time of sample collection, Total Suspended Solids (TSS) mg/L, Total Nitrogen (as N) mg/L, Ammonia-Nitrogen (as N) mg/L, Total Phosphorus (as P) mg/L, Five-

Day Biochemical Oxygen Demand (BOD5) mg/L, *Escherichia coli (E. coli)* no./100 mL, and estimated flow rate in gallons per day. Additionally, the producer shall record date and time the discharge was identified, date and time the discharge is halted, and an estimate of the volume of the discharge. If the producer provides sufficient justification, by phone, the monitoring requirement may be waived by DANR staff due to unsafe conditions associated with sampling.

Samples taken in compliance with the monitoring requirements for a discharge of manure or process wastewater established under this permit shall be collected prior to reaching surface waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Monitoring shall be conducted according to test procedures approved under ARSD 74:52:03:06 (a.b.r. 40 CFR, Part 136), unless other test procedures have been specified in this permit or approved by the Secretary. Analysis methods shall be sufficiently sensitive to ensure the minimum detection level for a pollutant is below the permit limit. If no sufficiently sensitive method is available, the method with the lowest minimum detection level shall be used.

The U.S. EPA has not finalized guidance or developed regulations on how to implement the U.S. Supreme Court's *County of Maui v. Hawai'i Wildlife Fund* decision. Because of this, any CAFO determined to have a functional equivalent discharge to waters of the U.S. will be required to obtain an individual permit.

Shallow Aquifers

DANR staff review permit application information to determine if process wastewater containment structures and land application fields are located over a shallow aquifer. Information used in the review includes on-site soil borings around the containment structure, First Occurrence of Aquifer Materials Maps, County Aquifer Studies, local well completion reports, and information from DANR's Geological Survey Lithologic Logs database. Figure 1 describes how the data is used to make the determination whether a process wastewater containment system or land application field is located over a shallow aquifer as defined by SDCL 34A-3A-24.

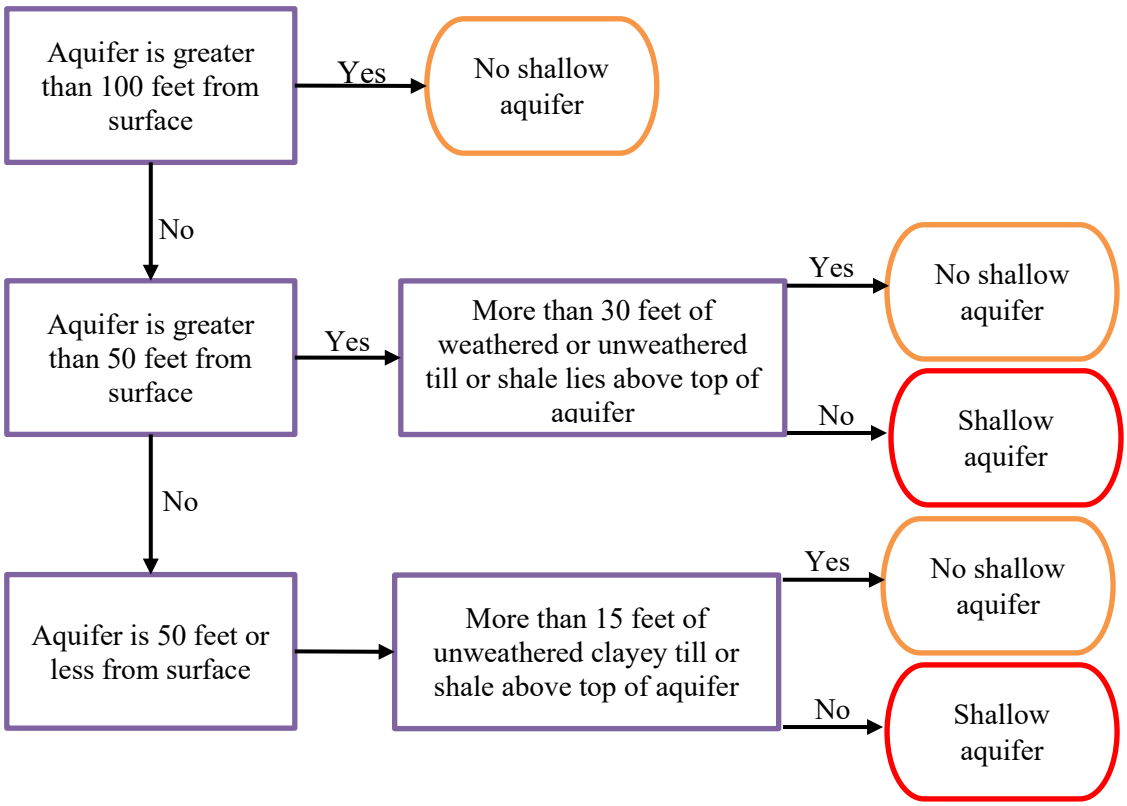

Figure 1. Flowchart for determining whether a shallow aquifer is present

Section 1.4.3.4. of the general permit requires the producer to comply with the requirements of the general permit to prevent migration of pollutants to groundwater and includes process wastewater containment liner design and construction standards. Section 1.4.3.6. of the general permit lays out the process to determine whether process wastewater containment structures are located over a shallow aquifer and whether a Groundwater Discharge Permit or shallow aquifer monitoring is required based on SDCL 34A-3A-24. If the process wastewater containment structure is located over a shallow aquifer, the permit contains requirements for the installation of monitoring wells and representative monitoring of those wells. DANR staff review the monitoring results to determine whether the containment system is impacting water quality.

Section 1.4.4.2.z. of the general permit requires the Secretary to determine whether a land application site is located over a shallow aquifer. If a land application site is located over a shallow aquifer, the permit includes additional nitrate-nitrogen sampling requirements. If the land application site is located over a shallow aquifer, the producer shall either:

1. Take soil samples for nitrate-nitrogen from both 0 to 2 and 2 to 4 feet prior to manure application, or
2. Take soil samples for nitrate-nitrogen to a depth of 2 feet both prior to manure application and within four weeks after harvesting the crop. This shall apply to all fields in the NMP located over a shallow aquifer. Once the producer takes the post-harvest soil samples in lieu of the 2

to 4-foot samples, it shall become a condition of this permit to continue taking post-harvest samples for the fields located over shallow aquifers.

Shallow aquifer monitoring is not required for land application sites because fields can be added to or removed from the NMP, can be irregularly shaped, and can be surrounded by fields where manure from other sources or commercial fertilizer is applied. Some producers regularly use only a portion of the approved fields for land application. Cost and the inability to obtain representative samples led to the decision not to include shallow aquifer monitoring for land application fields.

Land application areas

The producer, or agent acting on behalf of the producer, shall inspect the land application equipment, land application sites and irrigation equipment, if used, on a daily basis while land application of process wastewater or manure is occurring. For all fields where manure or process wastewater is applied, the producer, or agent acting on behalf of the producer, shall inspect the land application area boundaries on a daily basis during land application and upon conclusion of land application activities to verify that runoff and discharges are not occurring. This inspection is to ensure that the land application equipment is not leaking and runoff from the land application site and irrigation system is not occurring. If a discharge or spill is found where process wastewater or manure is reaching any surface waters of the state, flowing onto property not owned by the producer, or not included in the NMP, the producer is responsible for taking immediate steps to stop the discharge or spill and for following the reporting requirements of the permit. If a discharge is found to be reaching surface waters of the state, it shall be sampled for the parameters listed in the permit and reported to DANR.

As discussed in the Shallow Aquifers subsection of this section, if a land application site is located over a shallow aquifer, Section 1.4.4.3.a.1) of the general permit contains requirements for affected land application sites.

The purpose of these permit requirements is to make the producer aware of the movement of nutrients within the soil profile so they can make management decisions to capture nutrients before they leave the root zone and to protect any shallow aquifer. These same requirements can help prevent the movement of nutrients to field tile. Any loss of nutrients is a loss of fertilizer value to the producer resulting in a monetary loss from the loss of nutrients and a monetary loss from a reduced crop yield.

The purpose of the NMP is to ensure that the 4 R's (Right rate, Right source, Right application method, and Right application timing) are utilized to provide the proper amount of nutrients to the crop where it is needed while protecting surface waters of the state and shallow aquifers. ARSD 74:52:03:13(12) adopts the requirements in 40 CFR 122.44(k)(3). This section indicates that permit conditions shall include, when applicable, best management practices to control or abate the discharge of pollutants when numeric effluent limits are not feasible, or the practices are reasonably necessary to achieve effluent limits and standards or to carry out the purposes and intent of the federal Clean Water Act and state Water Pollution Control Act.

Consideration of Instream and Tile Sampling

Field tile is tubing or piping buried underground in fields to convey subsurface water from the soil profile to an outlet. If a land application field has open field tile inlets, the required buffers between

land application of manure or process wastewater and these inlets are shown on the field maps. DANR does not have the means to determine whether land application fields are tiled.

Other states have received requests to require sampling of field tile outlets and instream sampling of streams adjacent to land application fields.

Complete and accurate information for field tile and field tile outlets in South Dakota does not exist. While fields may have tile systems that serve a single field, many tile systems are historic, complex networks that may connect to other tile systems for fields not in an NMP or that are in a separate NMP before daylighting downstream of the original tile system. Downstream field tile outlets may be on property the producer does not have access to.

Most NMPs consist of a checkerboard of NMP fields adjacent to other non-NMP fields which may have a stream running between them. In some cases, there may be NMP fields for a different permitted operation also in the adjacent checkerboard of fields. Non-NMP fields are commonly fertilized using commercial fertilizer.

DANR does not have the ability to determine whether a source of nutrients is from a regulated NMP field, an unregulated nonpoint source field, or a combination of the two. Both 40 CFR 122.41(j)(1) and ARSD 74:52:03:06(5) state, "Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity." Since DANR would be unable to determine the source of any nutrients found in a field tile outlet or instream collected sample, DANR could not say the measurement would be representative of the CAFO activity. DANR will not require field tile outlet or instream sampling but will continue to focus on preventing manure and manure contaminated runoff from entering drain tile networks through the general permit's nutrient management planning requirement and visual inspections.

Design, Construction, Operation, and Maintenance Requirements

The general permit contains design, construction, operation, and maintenance requirements to ensure operations can comply with the permit's effluent limits, protect surface water quality, protect groundwater quality, and ensure manure management systems are designed and constructed using proper engineering and construction standards.

The general permit requires all chemicals handled on-site or transferred on-site that will be introduced to the containment structure to be identified in the Operation and Maintenance Guideline. Transfers of off-site waste that is not manure, litter, or process wastewater to permitted CAFOs may be approved on a temporary basis for a period up to one year. DANR has historically allowed these transfers under certain conditions. The permit sets requirements and limitations for these temporary waste transfers.

Siting Considerations

Manure containment structures shall not be located within the 100-year flood plain unless the structure is protected from inundation and damage that may occur during flood events. The top of the freeboard shall be constructed at least one foot above the elevation of the 100-year flood. Acceptable methods used to determine this elevation are identified in the permit.

Manure management systems, manure disposal sites, and process wastewater disposal sites shall not be located closer than 250 feet from an existing private water well not owned by the producer or 1,000 feet from an existing public water well, constructed to supply water to water distribution systems as defined by SDCL 46-1-6(17) or surface waters of the state classified by the South

Dakota Surface Water Quality Standards, ARSD 74:51:02 and 74:51:03, for a domestic water supply beneficial use. Manure management systems, manure disposal sites, and process wastewater disposal sites shall not be located closer than 150 feet from a water well owned or proposed to be drilled by the producer supplied by an aquifer where the top of the aquifer is less than 100 feet below the land surface or 100 feet from a water well owned or proposed to be drilled by the producer supplied by an aquifer whose top is 100 or more feet below the land surface. These setback requirements do not apply to manure management systems constructed prior to August 13, 1996.

The general permit requires producers to consider several conditions when siting, building, and operating a CAFO and recommends best management practices to reduce odor, flies, dust, noise, and other nuisances. These include considering the distance to neighboring homes, public buildings, residential areas, and recreational areas as well as the prevailing wind direction. These best management practices are not required because many of these issues are normally handled at the county level through land use ordinances.

As the South Dakota Legislature has given the authority to establish setbacks to structures and other land uses to counties and municipal planning and zoning bodies, local governments may have setback distances, buffer zone widths, and other siting or environmental requirements established in local ordinances. The producer is responsible for complying with all local ordinances and requirements.

Operations that Process or Store Manure or Process or Store Process Wastewater

This permit requires operations that process or store manure or process or store process wastewater that will be covered by a permitted CAFO's permit to meet the permit's design, construction, operation, and maintenance requirements for containment structures. No reduction in the required storage in the CAFO's manure management system is allowed. For AFOs sending manure or process wastewater to a separately permitted processing operation, the volume of the manure or process wastewater received from and returned to each AFO shall be measured, reported, and copies of the records provided to each AFO no less than monthly.

Containment System Tile and Covered Holding Ponds Sampling

This permit requires that water from tile located closer than 50 feet from the toe of the exterior berm or foundation of a containment structure or any other or any other part of the production area and from storm water pump systems for covers on containment structure(s) shall either be directed from those systems to the containment structure and be included in the design volume below the maximum operating level or the outfall shall be included on a map with the outfall location's longitude and latitude. The permit requires quarterly sampling to demonstrate that the discharge is not process wastewater. When sampling indicates that the discharge consists of process wastewater, the permit requires additional sampling and corrective action. If process wastewater is detected twice within any five-year period, the discharge shall be directed to a containment structure.

Liner Design Requirements

There is no NPDES Effluent Limitation Guideline or state Surface Water Discharge Permit regulation pertaining to the use of liners at CAFOs. However, since manure containment systems are works of sanitary significance requiring the submission of engineering plans and specifications

to DANR for approval, the permit contains a design, construction, operation, and maintenance section addressing liner requirements.

Concrete Design Standards

This permit updates and revises the acceptable standards for concrete design and requires that the standards be applied within the scope of the specific standard.

- American Concrete Institute Standard (ACI) 318 has been updated to ACI 318-25 (2025) *Building Code Requirements for Structural Concrete*.
- ACI 350 has been updated to ACI 350-20 (2020) *Code Requirements for Environmental Engineering Concrete Structures*.
- ACI 360R-10 (2010) *Guide to Design of Slabs-on-Ground* Chapter 8 "Design of slab reinforced for crack-control width control" has been added to address the requirement to use steel rebar for slabs on ground such as feed storage pads and solid manure storage structures.
- American Water Works Association (AWWA) D115-20 (2020) "Tendon-Prestressed Concrete Water Tanks" has been added to provide a standard for these types of tanks.

The Livestock Services Program's evaluation of ACI-318 for containment structures determined the design code is not intended for certain uses.

Concrete Tanks and Reservoirs

ACI 318 Section 1.4.10 states "This code does not apply to the design and construction of tanks and reservoirs."

Because of this section, ACI 318 is not applicable to construction of any structures that are reasonably considered tanks or reservoirs. This would include deep pits, lift station wet wells, pull-plug pit barns, sand lanes, and other structures that typically contain liquids under normal operation. The commentary for this section of the code indicates requirements and recommendations for the design and construction of tanks and reservoirs are given in ACI 350, ACI 334.1R, and ACI 372R.

ACI 350 section 1.1.1.1 states "Environmental engineering concrete structures are defined as concrete structures intended for conveying, storing, or treating water, wastewater, or other liquids and non-hazardous material such as solid waste, and for secondary containment of hazardous liquids. For ancillary structures for which liquid tightness, gas tightness, or enhanced durability are essential, design considerations shall also conform to requirements of environmental engineering concrete structures."

Slabs on Ground

ACI 318 Section 1.4.8 states "This code does not apply to design and construction of slabs-on-ground, unless the slab transmits vertical loads or lateral forces from other portions of the structure to the soil." Based on this section, ACI 318 is not applicable for slabs on ground as typically found in pack barns, solid manure stacking pads, and solid raw material storage areas where the stored material contains thirty percent or more moisture content or which have free draining liquids. The appropriate code for these types of construction is either ACI 350 or ACI 360. DANR is limiting

use of ACI 360 to Chapter 8, as this chapter contains similar requirements as those in ACI 350 for crack control and DANR has not allowed the use of unreinforced concrete in liner applications.

Containment structures, whether storing solid manure or liquid manure, will require concrete construction meeting the minimum requirements of ACI 350 or ACI 360 Chapter 8. Use of ACI 318 for construction would be limited to structures for solid manure where storage is not planned. This may include stub walls in a barn with no manure storage or other structures where manure is not stored as part of the normal operation of the structure.

Removed Reference

The 2017 general permit referenced Midwest Plan Service 36 (MWPS-36) *Concrete Manure Storages Handbook* (1994). The most recent edition was published in 2005 which the publisher indicates is not intended to be used as a code or standard. The designs in MWPS-36 are based on ACI 318. Additionally, MWPS-36 does not require steel rebar reinforcement for slabs on ground as required by ACI 350 which is applicable to all concrete containment structures included in this permit. For these reasons, MWPS-36 has been removed as an acceptable standard for concrete design.

Stockpiling

Requirements for temporary and long-term stockpiling of manure, litter, or other by-products are included in the permit. Where the producer intends to use a stockpiling site for longer than 120 days outside of pen areas where manure and runoff will be directed to a containment structure or an approved covered containment structure, the producer is required to construct a permanent stockpiling area meeting the design requirements of this permit. Temporary stockpiling periods were changed to 30 days or less and for periods greater than 30 days up to 120 days on the recommendation of NRCS.

Nutrient Management Requirements

This permit requires the producer to develop, maintain, and follow an NMP to ensure proper application of manure and protection of surface and ground water. This has been a permit requirement since the South Dakota *General Water Pollution Control Permit for Concentrated Swine Feeding Operations* was issued in 1997 which predated U.S. EPA requirements. Current NMP requirements were developed using ARSD 74:52:10:01 a.b.r. 40 CFR 412, the South Dakota NRCS 590 Nutrient Management Conservation Practice Standard, requirements in the previous permits, and best professional judgement. The Secretary must approve the initial plan prior to land application of any manure.

Requirements for manure application on saturated, snow covered, or frozen soil have been updated and clarified in this permit. Evaluation of the recommendation to land apply to the upper 50% of the topography of an application field and the requirement to apply only on land with slopes less than 4 percent in the 2017 general permit determined that these are frequently conflicting management practices. Due to this conflict, this permit removes the recommendation to apply to the upper 50% of the topography.

This permit contains requirements for producers who wish to transfer manure and process wastewater between CAFOs covered under this permit. Because of the differences in terms and potential permit reissuance, transfers between CAFOs not covered under the same permit are not

allowed. Approval of transfers will only be considered when the receiving CAFO has adequate storage capacity available in the containment structure(s) and adequate acres available in the initial NMP.

Initial NMP

The initial NMP consists of planning documents that must be provided to ensure that the producer has enough land available to properly land apply the manure. Required documentation includes operational details including amount and type of manure produced, type of manure containment and handling affecting mineralization rates, planned application practices, and an estimated total nitrogen and phosphorus available for crop production. Each field included in the initial NMP requires a field map showing available land application areas and any applicable buffers and setbacks required by the permit, a field soil map identifying the predominant soil type, annual average soil loss, a 0 to 6-inch soil phosphorus test, planned 5-year crop rotation and yield goals, and where applicable, land application agreements signed by the legal landowner.

Operations with an approved initial NMP meeting the requirements of the 2017 general permit are required to submit an affirmation that they are not making changes to the existing initial NMP or submit a new or revised initial NMP. While the nitrogen recommendations for corn in South Dakota State University (SDSU) Extension's Fertilizer Recommendations Guide have been updated, all other requirements for the initial NMP remain functionally the same with this permit. After consultation with South Dakota NRCS, the Livestock Services Program determined that allowing for the continued use of a previously approved initial NMP where no changes are being made is acceptable. Producers submitting a new or revised initial NMP are required to use the new nutrient values for corn.

Annual NMP

For the actual application of manure, the producer shall also follow the annual NMP section of the general permit. The annual NMP utilizes information from the initial NMP, nutrient tests, and crop information to determine agronomic land application rates. All annual NMPs are required to use the updated Fertilizer Recommendations Guide to calculate land application rates.

The permit contains state technical standards for NMP development that a producer must use to determine if the land application shall be based on nitrogen need, one-year phosphorous crop removal, five-year phosphorous crop removal, or if no application is allowed. Tools are available for use in developing the initial NMP and determining proper application rates for nitrogen need and phosphorous crop removal. The NRCS is the main source of information to assist in developing and implementing the initial and annual NMP and the nutrient management planning tools.

Setbacks for Manure Application in South Dakota

Both permitted and unpermitted operations can significantly reduce the risk of pollutant movement with responsible planning for manure utilization.

Permitted CAFOs are required to have setbacks between manure land application fields and wells and waters of the state as part of the manure management planning process. Table 3 provides a quick reference for setback distances for manure-related activities.

Table 3. Required setback distances between manure application areas with water sources in South Dakota.

Protected Water	Setback to Manure Land Application Areas
Surface waters of the State [includes streams, lakes, ponds, reservoirs, marshes, watercourses, waterways (can be dry at times), springs, drainage systems, and other accumulations of water on the land surface]	• Minimum vegetated buffer is 35 feet[A] • Minimum non-vegetated buffer is 100 feet • Maintaining a 100-foot vegetated buffer can be required of certain NMPs[B] • Temporary[C] manure stockpiles must be located outside the 100-year flood plain, 200 feet from a natural or manmade drainage, and not over a shallow aquifer
Open tile line intake structure	
Producer's well where the top of aquifer is 100 feet or more below the land surface	100 feet
Producer's well where the top of the aquifer is less than 100 feet below the land surface	150 feet
Private drinking water well or source (on other's property)	250 feet
Public water supply wells or surface waters classified for the beneficial use of domestic water supply waters	1,000 feet

[A] Vegetated buffer is "a permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters of the state." Vegetated buffer areas do require regular maintenance, and this can include harvesting.
[B] An NMP based on crop-nitrogen or crop-phosphorus uptake, which considers presence of a 100-ft vegetated buffer in addition to soil phosphorus levels and soil loss estimates.
[C] Temporary is storage in one place for up to 120 days.

Soil and Manure Testing

Prior to land application, the producer is required to use the procedure described in the general permit to determine the appropriate application rates of manure and process wastewater. The application rate is based upon the operation's initial NMP, Table 2 of the permit, and the operation's annual NMP which consists of soil and manure analysis for nitrogen and phosphorous, type of crop, expected crop yields, legume credits, and the sampling date. Upon determining an application rate, the producer shall apply manure and process wastewater at or below the calculated rate. Failure to apply manure at or below the calculated rate is a violation of the general permit.

If land application fields are located over a shallow aquifer, additional soil sampling is required. The purpose of the sampling is to determine whether nitrogen is moving through the soil profile and to ensure it is utilized by the plant before it migrates beyond the root zone. The producer has the option of conducting 2 to 4-foot nitrate-nitrogen soil samples when samples are collected prior to manure application or 0 to 2-foot nitrate-nitrogen soil samples both prior to manure application and within four weeks after harvesting the crop. If the 2 to 4-foot test results indicate that there is greater than 30 pounds of nitrogen, the nitrogen recommendation in the producer's rate calculation

must be reduced an additional four pounds of nitrogen for each five pound increment above 30 pounds. If the residual nitrate-nitrogen in the 0 to 2-foot post-harvest soil sample is above 100 pounds per acre, the field will not be available for land application until one full growing season has passed. If a soil sample taken the following year shows the nitrate-nitrogen has dropped below 100 pounds per acre, manure application may resume.

These requirements are based on ARSD 74:52:02, the requirements in the South Dakota NRCS 590 Nutrient Management Conservation Practice Standard, and best professional judgment.

After discussions with SDSU Extension staff, the Mehlich-3 soil test has been added to the Olsen and Bray-1 soil tests in this permit as an allowable phosphorus soil test method.

Annual NMP requirement references for nutrient sampling and fertilizer recommendations were updated. References included in the permit are:

- NRCS guidance Sampling Soils for Nutrient Management SD-NRCS-FS-50 (April 2022);
- SDSU Extension publication Recommended Soil Sampling Methods for South Dakota FS935 (September; 2019);
- NRCS guidance Sampling Manure for Nutrient Management SD-NRCS-FS-36 (May 2022); and
- SDSU Extension publication Fertilizer Recommendations Guide (June 2023).

The SD-CPA-63 Nutrient Management Plan spreadsheet has been updated to incorporate changes in the Fertilizer Recommendations Guide. Where the initial NMP allows for the continued used of the existing plan if no changes will be made, operations will be required to use the updated Fertilizer Recommendations Guide for annual nutrient management planning.

Record Keeping

Each producer shall maintain on-site, for a period of five years from the date they are created, a complete copy of the NMP for their operation and the records specified in the permit. The producer shall make these records available to the Secretary upon request.

Inspection and Record Keeping Requirements

The permit contains inspection and recordkeeping requirements for the production area and the land application area. These inspection and recordkeeping requirements are based on ARSD 74:52:02, ARSD 74:52:10, and best professional judgment.

Site Inspection Requirements

This permit requires the producer to conduct daily inspections of water lines and visually inspect and document weekly inspections of all storm water diversion devices, runoff diversion structures, barns, mortality management facilities, devices channeling process wastewater to containment structures, and containment structures.

Record Keeping Requirements for the Production Area

1. Records documenting the required inspections.

2. Weekly records of the level of the manure and process wastewater in the process wastewater containment structures in relation to the maximum operating level marker.
3. Records documenting any actions taken to correct deficiencies required. Deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing immediate correction.
4. Records of mortalities management and practices used by the CAFO.
5. Records documenting the current design of any manure, process wastewater, or litter containment structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.
6. Records of the date, time and estimated volume of any overflow or discharge of manure or process wastewater from the manure management system.
7. Records of samples from discharge monitoring, containment system tile and covered holding ponds sampling, and monitoring wells, collected in accordance with the requirements of this permit.

These inspection and recordkeeping requirements are based on ARSD 74:52:02 and best professional judgment.

Annual Reporting Requirements

On or before March 28th of each year, the producer will be sent a report form that must be completed and returned to DANR. The report must include the following information for the previous calendar year:

1. The type of animals confined (swine weighing 55 pounds or more, swine weighing less than 55 pounds, beef cattle, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, geese, broiler chickens, layer chickens, or other), the maximum number of each type of animal confined at any one time, and whether confined in open lots or housed under roof;
2. A summary of all manure, litter and process wastewater discharges that have occurred from the production area or during land application, including date, time and approximate volume;
3. Estimated amount of total manure, litter and process wastewater generated by the producer (tons/gallons);
4. Estimated amount of total manure, litter and process wastewater transferred to other persons by the producer (tons/gallons);
5. Total number of acres for land application covered by the NMP developed in accordance with this permit;
6. Total number of acres under control of the producer that were used for land application of manure, litter and process wastewater;
7. A statement indicating whether the current version of the permittee's NMP was developed or approved by a certified nutrient management planner; and
8. The actual crop(s) planted and actual yield(s) for each field where manure, litter, or process wastewater was applied, copies of the results from manure, litter, process wastewater and soil

sampling, copies of the calculations showing the total nitrogen and phosphorus (if required) to be applied to each field including the amount of any supplemental fertilizer applied during the previous 12 months for fields owned, rented, or leased by the producer.

Overflow, Spill, or Discharge Reporting

Producers are required to report to DANR any overflow, spill, or discharge as soon as possible but no later than twenty-four (24) hours from the time the producer first became aware of the overflow, spill, or discharge. The permit includes a CAFO Discharge, Overflow, or Spill Form located in Appendix J to be submitted within 15 days in the case of an overflow or spill occurring or by the 28th day of the following month in the case of a discharge.

Endangered Species

CAFOs that apply for this NPDES permit are only allowed to discharge where provided for by ARSD 74:52:10:01 a.b.r. 40 CFR 412 as laid out in this general permit. This NPDES permit will only allow discharges when operations meet the requirements of the general permit by having a manure containment system that is properly designed, constructed, operated, and maintained and a 25-year 24-hour storm event occurs; therefore, any potential impacts will be minimized due to the increased flow in the receiving streams. Processing operations are prohibited from discharging under this permit. Due to the expected conditions when discharges are allowed, no listed endangered species are expected to be impacted by the issuance of the general permit.

The permit requires producers to develop and follow an NMP based on U.S. EPA requirements and South Dakota NRCS technical standards for nutrient management. The general permit also requires all operations with production areas or land application areas within ¼ mile of streams where, according to the U.S. Fish and Wildlife Service, Topeka shiners have been observed or have potentially occupied (http://danr.sd.gov/Agriculture/Livestock/FeedlotPermit/docs/TShinerMap.pdf) to develop and implement an Endangered Species Action Plan. The Endangered Species Action Plan shall identify best management practices that shall be implemented upon receiving permit coverage to minimize the likelihood of a discharge from entering waters of the state occupied by Topeka shiners. The Endangered Species Action Plan shall be included as an element of the submitted initial NMP and for revisions to any initial NMP.

Antidegradation

Antidegradation does not apply to this general permit because:

- discharges are not allowed except from a properly designed, constructed, operated, and maintained manure management system during a chronic or catastrophic storm event,
- the temporary nature of any allowable discharge, and
- expected limited impact of any allowable discharge.

Agricultural stormwater discharges are allowed by the permit as allowed by federal and state law. The results of this review are included in Attachment A.

General Permit Duration

The permit shall be effective for five years from the effective date.

The contacts for this permit within the Department of Agriculture and Natural Resources are Troy Roth, Paul Wegleitner, Heather Kent, Neal Konda, and Jason Roggow. The telephone number of the Livestock Services Program is (605) 773-4647.

ATTACHMENT A

Antidegradation Review

Permit Type: **CAFO**
Permit #: **SDGN-10000**
Receiving Stream: **Varies** Classification: **Varies**
If the discharge affects a downstream waterbody with a higher use classification, list its name and uses: **N/A**

APPLICABILITY

1. Is the permit or the stream segment exempt from the antidegradation review process under ARSD 74:51:01? Yes ☒ No ☐ If no, go to question #2. If yes, check those reasons why the review is not required:

- ☐ Existing facility covered under a surface water discharge General Permit is operating at or below design flows and pollutant loadings;
- ☐ Existing effluent quality from a surface water discharge General Permitted facility is in compliance with all discharge General Permit limits;
- ☐ Existing surface water discharge General Permittee was discharging to the current stream segment prior to March 27, 1973, and the quality and quantity of the discharge has not degraded the water quality of that segment as it existed on March 27, 1973;
- ☐ The existing surface water discharge General Permittee, with DANR approval, has upgraded or built new wastewater treatment facilities between March 27, 1973, and July 1, 1988;
- ☐ The existing surface water discharge permittee discharge to a receiving water assigned only the beneficial uses of (9) and (10); the discharge is not expected to contain toxic pollutants in concentrations that may cause an impact to the receiving stream; and DANR has documented that the stream cannot attain a higher use classification. This exemption does not apply to discharges that may cause impacts to downstream segments that are of higher quality;
- ☐ Receiving water meets Tier 1 waters criteria. Any permitted discharge must meet water quality standards;
- ☐ The permitted discharge will be authorized by a Section 404 Corps of Engineers permit, will undergo a similar review process in the issuance of that permit, and will be issued a 401 certification by the department, indicating compliance with the state's antidegradation provisions; or
- ☒ Other: No discharge is allowed by this permit for New Source swine, veal, and poultry, any housed lots with covered manure containment systems, or processing operations with NPDES permits. NPDES permits may not have a discharge except in the event of a 25-year, 24-hour storm event with documentation showing the facility is meeting the conditions of this permit. Discharges meeting the agricultural stormwater discharge definition are exempted by this permit.

No further review required.

ANTIDEGRADATION REVIEW SUMMARY

2. The outcome of the review is:

- ☒ A formal antidegradation review was not required for reasons stated in this worksheet. Any permitted discharge must ensure water quality standards will not be violated.
- ☐ The review has determined that degradation of water quality should not be allowed. Any General Permitted discharge would have to meet effluent limits or conditions that would not result in any degradation estimated through appropriate modeling techniques based on ambient water quality in the receiving stream, or pursue an alternative to discharging to the waterbody.
- ☐ The review has determined that the discharge will cause an insignificant change in water quality in the receiving stream. The appropriate agency may proceed with General Permit issuance with the appropriate conditions to ensure water quality standards are met.
- ☐ The review has determined, with public input, that the General Permitted discharge is allowed to discharge effluent at concentrations determined through a total maximum daily load (TMDL). The TMDL will determine the appropriate effluent limits based on the upstream ambient water quality and the water quality standard(s) of the receiving stream.
- ☐ The review has determined that the discharge is allowed. However, the full assimilative capacity of the receiving stream cannot be used in developing the General Permit effluent limits or conditions. In this case, a TMDL must be completed based on the upstream ambient water quality and the assimilative capacity allowed by the antidegradation review.
- ☐ Other: _____

3. Describe any other requirements to implement antidegradation or any special conditions that are required as a result of this antidegradation review: _____

Heather Kent — Reviewer
November 7, 2025 — Date

Troy Roth — Program Administrator
November 7, 2025 — Date