Informal Outreach for General CAFO Permit and Overview of Reissuance Process

Livestock Services Program



Agenda

- Reissuance process
- Program and general permit history
- Reasons for proposed changes
- Summary of proposed changes
- How to submit comments and suggestions



Website

- Informational webpage for informal permit reissuance process: <u>https://danr.sd.gov/Agriculture/Livestock</u> /FeedlotPermit/FormsPermits/CAFO Regulations.aspx
- Information includes:
 - Copies of the draft permits
 - Upcoming process information
 - Where to submit comments



Reissuance Process

Informal Process

- Currently in this stage
- Public outreach prior to formal permit reissuance
- Comments and suggestions can be submitted to DANR



Reissuance Process

Formal Process

- Public notice in newspapers and on DANR's one stop public notice website
- 2. Notice to all municipalities, counties, tribal governments, permitted operations, and interested parties
- 3. DANR responds to all comments received
- 4. Opportunity for a contested case hearing



Reissuance Process

Future Notifications

 Contact DANRMail@state.sd.us to request to be included as an interested party for the CAFO permit reissuance



Program and General Permit <u>History</u>

- 1993: EPA delegated the National Pollutant Discharge Elimination System (NPDES) Program to South Dakota, but EPA had no permit for concentrated animal feeding operations (CAFOs)
- 1996: The South Dakota Pork Producers approached the Department of Environment and Resources (DENR) about putting in place a permit because of expected growth in the swine industry



Program and General Permit History

- 1997: A general permit for new or expanding swine CAFOs was issued
- 1997: The South Dakota Department of Agriculture asked DENR to put together a permit for all other animal types.
- 1998: DENR issued the general permit for all other animal types
- 2003: DENR issued a general permit for all CAFOs



Program and General Permit <u>History</u>

- 2007: South Dakota legislative session passed SB9 (34A-2-36.2) requiring CAFOs to operate under a general or individual water pollution control permit
- Without a permit concerns were:
 - No road map for environmental compliance
 - Local hearings for conditional use permits more controversial



Program and General Permit History

- 2017: A combined NPDES and State general permit for all CAFOs was issued
- 2021: DENR merged with the Department of Agriculture to become the Department of Agriculture and Natural Resources (DANR)

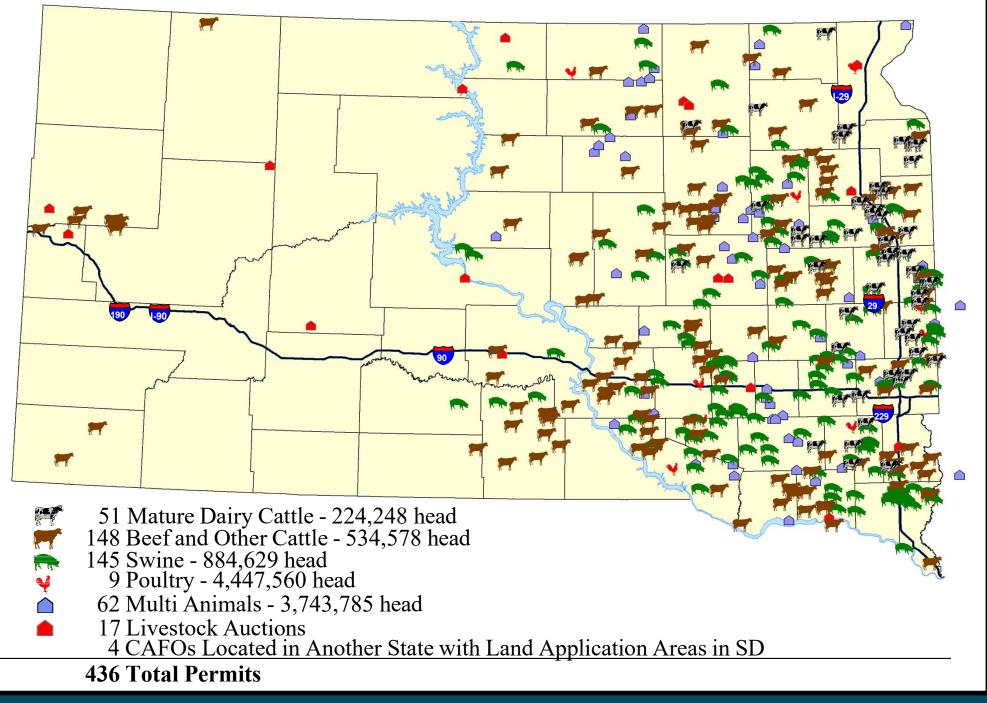


Program and General Permit History

- 2021: South Dakota legislative session passed SB52 (34A-2-36/34A-2-112) changing the term for state CAFO permits to 10 years
- 2023: South Dakota legislative session passed SB93 (34A-2-36.3) requiring operations that process or store manure or process or store process wastewater equivalent to a large CAFO without coverage under a CAFO's permit to apply for their own permit.
 - Expected to apply to mostly digesters



SD DANR Permitted CAFOs - January 1, 2024



Reasons for Proposed Changes

- Changes based on DANR's interaction with producers, engineers, crop consultants, and others
- Updates to South Dakota State University Extension Service's Fertilizer Recommendations Guide
- CAFO permit reissuance processes in other states



Summary of Proposed Changes General Overview

- Separate into two general permits: NPDES and State
 - Goal is to keep the permits as similar as possible
- Manure digesters can be permitted as part of a CAFO's production area under a CAFO's permit or separately
- Permit format changed to show full numbering next to each item



Summary of Proposed Changes Electronic Resources and Reporting

- All documents and links to websites referenced within both permits will be placed on the Livestock Services Program's website to ensure reference availability
- Applications and reports must be submitted electronically when capability is available



Summary of Proposed ChangesTwo Separate PermitsState vs NPDES PermitNPDESState

- Allows a precipitation-related discharge in certain situations
- 5 year permit term

 Except for Agricultural Stormwater exemption, does not allow a precipitation-related discharge

• 10 year permit term



Summary of Proposed Changes **Two Separate Permits Processing Operations NPDES**

• Operations that process or store manure or process or store process wastewater may be permitted under a CAFO's permit or separately

State

 Operations that process or store manure or process or store process wastewater must be covered under a CAFO's general or individual permit



SOUTH DAKOTA DEPARTMENT of AGRICULTURE and NATURAL RESOURCES

NOTE: Changes to the state permit were determined to be necessary after the draft permits were distributed

• Section 1.1 in both permits

New Definitions

- Agricultural Stormwater Discharge
- Containment Structure
- Processing Operation
- Strip-Till Cropland
- Deleted Definition
 - Designed to Not Discharge



• Section 1.1. in both permits

"Agricultural Stormwater Discharge" means a precipitation related discharge of manure, litter, or process wastewater from land application areas where the manure, litter, or process wastewater has been applied in accordance with the approved nutrient management plan designed to ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater (ARSD 74:52:02:22 a.b.r. 40 CFR 122.23(e)).



• Section 1.1. in both permits

"Containment Structure" means any structure designed to store, treat, or process manure, litter, or process wastewater at a CAFO or any structure designed to store, treat, or process manure, litter, process wastewater, or other organic by-products at a processing operation.



Section 1.1 in both permits

"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 concentrated animal feeding operation.



Section 1.1 in both permits

"Strip-till Cropland" means land which is subject to a conservation farming practice used to establish the soil characteristics necessary to limit erosion from runoff that involves tilling a narrow band (less than one third of the total row area) of soil while leaving the rest of the field undisturbed. Strip-till cropland should equate to a soil tillage intensity rating (STIR) of 20 or less using an approved NRCS water erosion prediction technology.



- Section 1.1 in both permits
- Minor Revisions to Definitions
 - ARSD
 - Discharge
 - Incorporation (State permit only)
 - Major Modification
 - Maximum Operating Level
 - No-till Cropland
 - Overflow
 - Producer
 - Setback
 - Surface Waters of the State



Summary of Proposed Changes Operations Required to Obtain a Permit Processing Operations

- Section 1.2.1.3. in NPDES permit
- Requirement for processing operations not covered under a CAFO's permit to apply for their own permit
- Processing operations not covered under a CAFO's permit will need to apply for NPDES general permit coverage

NOTE: Changes to the state permit were determined to be necessary after the draft permits were distributed



Summary of Proposed Changes Operations Required to Obtain a Permit Soil Plant Air Water (SPAW) Model For Existing Operations NPDES State

- Section 1.2.2.1.d.
- Swine, poultry, and veal operations with uncovered containment structures that meet the new source definition are required to submit SPAW models
- Section 1.2.2.1.d.
- CAFOs with uncovered production areas that have a SPAW model approved after April 15, 2017 are not required to submit a new SPAW model



Summary of Proposed Changes Permit Application Requirements Operations with NMPs Meeting 2017 General Permit Requirements

- Sections 1.2.2.1.e. and 1.2.2.2.f. in both permits
- Operations may continue to use their approved NMP with an affirmation that they are not changing the NMP or will need to submit a new or revised NMP



Summary of Proposed Changes Permit Application Processing

NPDES

- Section 1.2.3
- No changes from 2017 general permit

State

- Section 1.2.3
- New and expanding operations will be public noticed when the permit application is complete and approvable
- Permit coverage will be issued with the approval of the application allowing for construction to begin
- A Certificate of Compliance will be issued allowing the operation to be populated or placed into service



Summary of Proposed Changes Permit Termination and Closure

- Section 1.3 through 1.3.2. in both permits
- Existing requirements apply to operations that are closing
- Establishes requirements when an animal feeding operation does not meet the criteria to need a permit and will continue to be used for livestock production



Summary of Proposed Changes Effluent Limits

Processing Operation Discharge

- Section 1.4.1.3 of the NPDES permit
- Processing operations may have no discharge of manure, litter, process wastewater, or other organic byproducts

NOTE: Changes to the state permit were determined to be necessary after the draft permits were distributed



Summary of Proposed Changes Effluent Limits

Agricultural Stormwater Exemption

- Section 1.4.1.3 in state permit
- Section 1.4.1.4 in NPDES permit
- No discharge of manure, litter, process wastewater or other organic by-products from land application areas unless the discharge meets the agricultural stormwater definition



Summary of Proposed Changes Effluent Limits

Water Quality Based Effluent Limits

- Section 1.4.1.4 in state permit
- Section 1.4.1.5 in NPDES permit
- Must not cause or contribute to a violation of Water Quality Standards



Summary of Proposed Changes Discharge Monitoring

NPDES

State

- Sections 1.4.2 through 1.4.2.2.
- In the event of a nonagricultural stormwater discharge, the producer will be required to collect samples, have them analyzed, and submit results to the department
- Sections 1.4.2 through 1.4.2.3.c.
- In the event of a nonagricultural stormwater discharge, the producer will be required to collect samples, have them analyzed, and submit results to the department
- Sets conditions when an operation is no longer eligible for state permit coverage



Summary of Proposed Changes Design, Construction, and Operation Forcemain Piping

- Section 1.4.3.3.f in both permits
- Updated to include specific allowable types of piping



Summary of Proposed Changes Design, Construction, and Operation Storage Capacity

- Section 1.4.3.3.h.7) in both permits
- No reduction in required storage capacity for manure or process wastewater that is sent to a processing operation
- Included requirement of current practices that ensure an operation remains in compliance when a digester stops operating



Summary of Proposed Changes Design, Construction, and Operation Chemical Handling and Containment

- Section 1.4.3.3.k. in both permits
- Included requirement for applicable chemical handling protocols and identification of all chemicals introduced to the containment structure



Summary of Proposed Changes Design, Construction, and Operation 100-Year Flood Plain

- Section 1.4.3.3.r. in both permits
- Included how a producer's design engineer can justify not using floodplain modeling where potential to flood is not reasonable due to site topography



Summary of Proposed Changes Design, Construction, and Operation Storage Areas

- Section 1.4.3.3.z. in both permits
- Clarified requirements for feed and other raw materials storage areas to ensure process wastewater generated from these areas is contained



Summary of Proposed Changes Design, Construction, and Operation Returns from Processing Operations

- Section 1.4.3.3.aa. in both permits
- Requirements for monitoring and recording manure or process wastewater received by and returned from processing operations to ensure volume returned is not in excess of that received

NOTE: Changes to the state permit for processing operations were determined to be necessary after the draft permits were distributed



Summary of Proposed ChangesDesign, Construction, and OperationDischarge From Containment System Tileand Covered Containment StructuresNPDESState

- Section 1.4.3.3.bb.
- Must be contained or sampled to demonstrate the discharge is not process wastewater
- No discharge permitted



Summary of Proposed Changes Design, Construction, and Operation Earthen Liner Material

- Section 1.4.3.4.a.3) in both permits
- Clarified that only materials classified as CL or CH can be used to construct earthen liners



Summary of Proposed Changes Design, Construction, and Operation Earthen Liner Compaction

- Section 1.4.3.4.a.6) in both permits
- Revised to include requirement for both compaction and permeability testing
- Applies to containment structures:
 - Covered
 - Located over a shallow aquifer
 - Recommended soil compaction greater than 95% of standard proctor density



Summary of Proposed Changes Design, Construction, and Operation Concrete Design References

- Section 1.4.3.4.c. in both permits
- American Concrete Institute (ACI) Standards must be used within the scope of the standards
- Updated references to ACI 318 and ACI 350
- Added ACI 360R, Chapter 8
- Eliminated reference to Midwest Plan Service publication MWPS-36



Summary of Proposed Changes Design, Construction, and Operation Stockpiling

- Sections 1.4.3.5. through 1.4.3.5.c.2) in both permits
- Reorganized to provide better clarity on the requirements



Summary of Proposed Changes Design, Construction, and Operation Temporary Stockpiling

- Sections 1.4.3.5.d and 1.4.3.5.e. in both permits
- Revised temporary stockpiling periods
 - Increased shorter period from less than 14 days to less than 30 days
 - Adjusted longer period to 30 to 120 days to match
- Clarified location requirements for each temporary stockpiling period



Summary of Proposed Changes Design, Construction, and Operation Liquid Containment Structures Over Shallow Aquifers

- Section 1.4.3.6. in both permits
- Require processing operations with liquid containment structures to meet existing shallow aquifer protection requirements

NOTE: Changes to the state permit for processing operations were determined to be necessary after the draft permits were distributed



Summary of Proposed Changes Nutrient Management Plan Dewatering Equipment Availability

- Section 1.4.4.1.c. in both permits
- Revised dewatering and land application equipment availability requirement when an open lot's containment structure storage exceeds the maximum operating level



Manure Incorporation

- Section 1.4.4.1.n. and 1.4.4.1.o. in both permits
- Added strip-till to management types not required to incorporate manure or process wastewater



Summary of Proposed Changes Nutrient Management Plan Application on Saturated, Snow Covered, or Frozen Ground

- Sections 1.4.4.1.s. through 1.4.4.1.s.10) in both permits
- Clarified requirements for land application
- Removed recommendation to apply to upper 50% of topography
 - Will update number references that were changed with this removal



- Transfer of Manure
 - Section 1.4.4.1.t. in both permits
 - Allows and sets process for transfer of manure and process wastewater between permitted CAFOs



- Section 1.4.4.2.k. in both permits
- Included requirement to submit an acknowledgement that application to saturated, snow covered, or frozen ground is a permit violation unless planned for in the initial NMP
- Moved language for showing location of temporary stockpile locations from stockpiling section to field map section



Summary of Proposed Changes Nutrient Management Plan Local Government Setbacks and Buffer Zones

- Section 1.4.4.2.I. in both permits
- Information must be included in NMP but no longer required on field maps



Summary of Proposed Changes Nutrient Management Plan Crop Yield Goals

- Section 1.4.4.2.n. in both permits
- If needed, allows for SDSU developed yield estimation procedure when NRCS Crop Yield Tables or South Dakota Agricultural Statistics Service published yields have not been updated



Phosphorus Testing

- Sections 1.4.4.2.p., 1.4.4.2.r., and 1.4.4.2.s. in both permits
- Included Mehlich-3 to soil tests used to determine nitrogen need or phosphorus removal based land application using guidance provided by SDSU
- Mehlich-3 test added to existing Bray test column in Table 2



Fertilizer Recommendations Guide

- Sections 1.4.4.2.t. and 1.4.4.3.a.4)a) in both permits
- Updated reference to SDSU Extension publication Fertilizer Recommendations Guide (June 2023) to incorporate the new corn fertilizer recommendations
- Initial plan: May use NMP approved under 2017 permit until NMP is modified
- Annual plan: Must use new fertilizer recommendations for annual planning



Land Application Outside South Dakota

- Section 1.4.4.2.v. in both permits
- Clarified language related to land application of manure that occurs on land outside of the State of South Dakota's jurisdiction



- Section 1.4.4.2.y. in both permits
- Clarified requirements for sharing NMPs
- Only allowed under the same permit
- Requires agreements executed by legal landowner(s) and both operations



Nutrient Sampling

- Soil: Section 1.4.4.3.a.2) in both permits
- Manure: Section 1.4.4.3.a.3) in both permits
- Updated references to SDSU and NRCS publications



Summary of Proposed Changes Nutrient Management Plan Temporary Field Transfer

- Section 1.4.4.3.b. in both permits
- Included language for the temporary transfer of land application fields between permitted operations
- Operations must be covered under the same general permit



Summary of Proposed Changes

Site Inspection Requirements

Weekly Inspections NPDES

State

- Section 1.4.5.3
 - Clarified what to look for during weekly inspections

• Section 1.4.5.5

 New item identifying inspection requirements for containment system tile and covered holding ponds identified in Section 1.4.3.3.bb. • Section 1.4.5.3

 Clarified what to look for during weekly inspections



Summary of Proposed Changes Reporting Requirements

- Section 1.6. in both permits
- Updated to clarify 24-hour reporting requirements
- Added Discharge, Overflow, or Spill Reporting Form located in Appendix J for follow-up reporting to DANR



Summary of Proposed Changes **Individual Permits NPDES**

• Section 3.14.5 Included new criteria for processing operations

• Section 3.14.6 New discharge criteria

State

- Section 3.14.5
 - Included new criteria for processing operations

NOTE: Changes to the state permit for processing operations were determined to be necessary after the draft permits were distributed



Comment Submission

Keys to Effective Comments

- Be specific
- Point out unintended effects
- When possible, provide technical information
- Suggest solutions, do not just identify problems
- Include examples
- Comments outside DANR's water pollution control permit authority cannot be addressed by this permit



Comment Submission Where To Submit Comments Electronic Email: DANRMail@state.sd.us ATTN: Livestock Services Program in the subject line

By Mail

Livestock Services Program Department of Agriculture and Natural Resources 523 E Capitol Avenue Pierre, SD 57501



Website

- Informational webpage for informal permit reissuance process: <u>https://danr.sd.gov/Agriculture/Livestock</u> /FeedlotPermit/FormsPermits/CAFO Regulations.aspx.
- Information includes:
 - Copies of the draft permits
 - Upcoming process information
 - Where to submit comments

