2017 General Water Pollution Control Permit for Concentrated Animal Feeding Operations Overview

May 16, 2017

The reissued *General Water Pollution Control Permit for Concentrated Animal Feeding Operations* became effective on April 15, 2017.

The Feedlot Permit Program has 427 concentrated animal feeding operations (CAFOs) with coverage under the 2003 general permit and 3 CAFOs with individual permits. There are 1,136,463 acres in approved nutrient management plans. Based on the cropping information in the approved nutrient management plans, these fields are capable of accommodating (on average) 106,224,091 pounds of Nitrogen and 39,450,446 pounds of Phosphorous annually.

The 2017 general permit meets all federal and state requirements, is protective of South Dakota's surface waters and shallow aquifers, and continues to be a roadmap for environmental compliance for producers.

Chronology

- April through October 2015, DENR met with interested parties.
- 488 people were invited to participate in a webinar to go over changes in the
 proposed permit. The September 17, 2015, webinar was held at six Extension
 Service sites statewide and was attended by 63 people. DENR accepted written
 comments on the proposed permit, responded to all comments received, and made
 changes to the proposed permit based on the comments received.
- The proposed general permit and December 16, 2015, contested case hearing were public noticed by October 8, 2015, in 10 daily newspapers, and was mailed to 931 interested parties including every county, municipal, and tribal government.
- 27 people submitted comments during the comment period, and 11 parties submitted petitions to intervene in the hearing by the petition deadline.
- On December 8, 2015, the Secretary received a request from Dakota Rural Action to delay the hearing, and the Secretary granted the request on December 11, 2015.
- On March 15, 2016, the hearing was rescheduled for September 27-29, 2016.
 Notice of the hearing date was provided to all intervening parties.
- A public notice of the rescheduled hearing was published in the 10 daily newspapers and mailed to the intervening parties on August 2, 2016.
- On September 26, 2016, Dakota Rural Action submitted a Motion to Suspend the Hearing. The motion was not granted.

- The 2½ day hearing, attended by 80 people, was held September 27-29, 2016. At
 the end of the hearing, the Secretary adopted the general permit with changes
 based on both comments received during the comment period and testimony
 during the hearing.
- Representing the Feedlot Permit Program, the Office of Attorney General submitted proposed Findings of Fact and Conclusions of Law 39 pages, 244 findings, and 20 conclusions on November 21, 2016.
- The other parties, to include Dakota Rural Action, had 30 days to submit their objections and findings, but Dakota Rural Action requested and was granted a 45-day extension.
- On February 6, 2017, Dakota Rural Action submitted Objections to the Proposed Findings of Fact and Conclusions of Law.
- After considering the Feedlot Permit Program's proposal and Dakota Rural Action's objections, the Secretary adopted Findings of Fact and Conclusions of Law on March 10, 2017.
- Existing operations have one to four years to submit a permit application. They are required to submit a permit application sooner than scheduled if they plan to make a modification listed in the permit (for example, if they expand their animal numbers).

Reasons for Permit Changes

- 2012 EPA Regulations
- December 2012 South Dakota Natural Resources Conservation Service's (NRCS) 590
 Nutrient Management Standard revisions
- Changes based on interaction and suggestions from producers, engineers, crop consultants, environmental groups, and others

Summary of Significant Changes

• The permit can either be a state permit or a National Pollutant Discharge Elimination System (NPDES) permit.

	State Permit	NPDES Permit
Effluent	No discharge to waters of the state	Allows certain operations to discharge
Limits	in any circumstance	to waters of the state in the event of
		a 25-year, 24-hour storm event
Permit	Requires NRCS' Soil Plant Air	SPAW model only required for new
application	Water (SPAW) model to verify	source swine, poultry, and veal
	operation is designed to not	operations
	discharge	

	State Permit	NPDES Permit
Permit Issuance Process	 Does not allow for a contested case hearing If a public notice is required, the public notice and DENR's review are concurrent Operations must obtain DENR approval before beginning construction Operations must obtain permit coverage and a Certificate of Compliance before populating 	 Allows for a contested case hearing If a public notice is required, DENR's review and recommendation must be complete before the public notice Operations must obtain permit coverage before beginning construction Operations must obtain Certificate of Compliance before populating
Annual	Same as 2003 permit requirements	In addition to 2003 permit
reporting	based on EPA's 2003 regulations	requirements, requires all annual
		nutrient management information to
		be submitted

All other requirements such as design, construction, nutrient management planning, inspection, and record keeping requirements are the same for both permits.

Design, Construction, Operation and Maintenance Changes

- Clarify design standards and update referenced design standards
- Adds DENR Water Rights Program's 100 foot setback for wells with the top of aquifer depth greater than 100 feet to existing well setbacks
- Reference NRCS' national standard for clay liner and set design requirements
- Include design requirements for synthetic liners
- Add design requirements for anaerobic digesters, calf hutches, and feed storage areas
- Specify requirements for drain tile located near manure/process wastewater containment systems
- All operations with manure containment systems or land application areas within ¼
 mile of streams where Topeka shiners have been observed or have potentially
 occupied shall develop and implement an Endangered Species Action Plan
- Revise and clarify requirements for permanent and temporary stockpiling sites

Nutrient Management Plan (NMP) Changes

 Requires a 5 year crop rotation instead of a 3 year crop rotation. Allows for the use of alternate crops in the rotation

- Updated Phosphorous Index Table to match South Dakota NRCS' 590 Nutrient Management standard
- Includes requirements for manure or process wastewater sent out of state
- To match NRCS' Nutrient Management standard, requires planning in case land application is needed from a properly designed, constructed, operated, and maintained system during saturated, snow covered, or frozen soil conditions
- Allows a producer to give away up to 100 cubic yards of solid manure each year if nutrient results are provided to land owner. If the producer wants to give away more than 100 cubic yards, an individual permit is required
- Contains requirements that allow two operations within two miles of each other to use one nutrient management plan
- Includes soil and manure sampling methods and laboratory certification requirements
- Requires mobile land application systems, such as those with portable hoses and injection equipment, to use a flow meter and on board radio controller during land application so the pump can be quickly shut off if there is a pressure drop that may indicate a leak or pipe failure
- Includes recommended practices for land application near pattern tile
- Includes requirements for precision/variable rate application

Other Changes

- References South Dakota Codified Law 34A-2-36.2 (2007) which requires CAFOs to obtain a water pollution control permit in the operations required to obtain permit coverage section of the permit.
- Moved existing language requiring manure from out of state CAFOs being land applied in South Dakota to obtain permit coverage for their land application to the section of the permit that indicates which operations are required to obtain permit coverage. Clarifies that EPA NPDES permitted CAFOs in *Indian Country* do not need permit coverage for their land application activities in South Dakota.
- Requires new or expanding operations with twice the number of animals at the threshold to be a large CAFO using wells or surface water sources to install a water meter to verify water usage to determine whether a water right is needed.
- Added bankruptcy reporting requirements
- Updated the section that indicates additional permits or requirements that may apply to a CAFO to include other possible permits and requirements not listed in the current permit.