

Note: This page will be replaced with a copy containing the assigned permit number once coverage is authorized.

**SOUTH DAKOTA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
JOE FOSS BUILDING  
523 EAST CAPITOL AVENUE  
PIERRE, SOUTH DAKOTA 57501-3182**

**FACILITY NAME**

**GENERAL WATER POLLUTION CONTROL PERMIT FOR  
CONCENTRATED ANIMAL FEEDING OPERATIONS**

In compliance with the provisions of the South Dakota Water Pollution Control Act and the Administrative Rules of South Dakota, chapters 74:52:01 through 74:52:11, the South Dakota Department of Environment and Natural Resources directs Concentrated Animal Feeding Operations to have no discharge from their manure management systems to waters of the state. In the event that chronic or catastrophic storm events occur, this permit allows an overflow or discharge from certain manure management systems provided the producer meets the terms and conditions of this permit.

This permit shall become effective October 20, 2003.

This permit and the authorization to discharge shall expire at midnight, October 19, 2008.

Signed this 12th day of September, 2003.



Authorized Permitting Official

Steven M. Pirner  
Secretary  
Department of Environment and Natural Resources

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## **1.0 EFFLUENT LIMITATIONS**

### **1.1. Definitions.**

- 1.1.1. A “25-year, 24-hour storm event” is the amount of rainfall in a 24-hour period expected to occur only once every 25 years. Typically, the 25-year, 24-hour storm event is about 3 inches in western South Dakota and 5 inches in eastern South Dakota. The map in Appendix E shows the actual amount of rainfall that constitutes the 25-year, 24-hour storm event for South Dakota.
- 1.1.2. A “100-year, 24-hour storm event” is the amount of rainfall in a 24-hour period expected to occur only once every 100 years. Typically the 100-year, 24-hour storm event is about 4 inches in western South Dakota and 6 inches in eastern South Dakota. The map in Appendix E shows the actual amount of rainfall that constitutes the 100-year, 24-hour storm event for South Dakota.
- 1.1.3. “Animal feeding operation” 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. Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other (within one mile), or if they use a common area or system for the disposal of manure.
- 1.1.4. “Best Management Practices” (BMP) means schedules of activities, prohibitions of practice, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, manure disposal, manure application, manure stockpiles, or drainage from raw material storage.
- 1.1.5. A “Chronic or Catastrophic Event” is a single precipitation event, or a series of rainfall events in a short period of time, that totals or exceeds the volume of a 25-year, 24-hour storm event or a 100-year, 24-hour storm event for new swine, poultry and veal calf operations that commenced construction after February 12, 2003. The event includes tornadoes, or other catastrophic conditions. The event would directly result in, or cause, an overflow from the containment structure or lagoon that receives and contains runoff from an open lot.
- 1.1.6. A “Concentrated Animal Feeding Operation” is an animal feeding operation that meets the following criteria for a large, medium, or small concentrated animal feeding operation:
  1. A large concentrated animal feeding operation as described in Table 1 on the following page.
  2. A medium concentrated animal feeding operation as described in Table 1 on the following page and meets one of the following conditions: 1) Pollutants are discharged into waters of the state through a man-made ditch, flushing system, or other similar man-made device; or 2) 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 concentrated animal feeding operation as described in Table 1 and designated as a concentrated animal feeding operation by the Secretary considering the following factors:
    - a. The size of the animal feeding operation and the amount of manure or process wastewater reaching waters of the state;

- b. The location of the animal feeding operation 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 Concentrated Animal Feeding Operations

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

<sup>1</sup> Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.

<sup>2</sup> Animal feeding operation uses a liquid manure handling system.

<sup>3</sup> Animal feeding operation 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.

- 1.1.7. “Housed lot” means totally roofed buildings that may be open or completely enclosed on the sides. Animals are housed over solid concrete or dirt floors, slotted floors over pits or manure collection areas in pens, stalls, or cages. Housed lot is synonymous with other industry terms such as slotted floor buildings.
- 1.1.8. “Local requirements” mean requirements adopted by county or city governments applicable to animal feeding operations within their respective jurisdictions.
- 1.1.9. “Manure” means manure, bedding, compost, and raw materials or other materials commingled with manure or set aside for disposal.
- 1.1.10. “Manure management system” means any piping, containment structures, and disposal appurtenances associated with the collection, storage, treatment, and disposal of manure or wastewater at an animal feeding operation.
- 1.1.11. “Multi-year phosphorus application” means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, litter, or process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

- 1.1.12. “No-till cropland” means land which is subject to a conservation farming practice: where the soil is left undisturbed from harvest to planting; where planting or drilling is done in a narrow seedbed or slot created by coulters, row cleaners, diskopeners, or in-row chisel; and where this conservation farming practice has been ongoing for at least four consecutive years to establish the soil characteristics necessary to reduce or eliminate erosion from runoff.
- 1.1.13. “Open Lot” means pens or similar confinement areas with dirt, or concrete (or paved or hard) surfaces. Animals are exposed to the outside environment except for possible small portions affording some protection by windbreaks or small shed type shade areas. Open lot is synonymous with other industry terms such as pasture lot, dirt lot, or dry lot.
- 1.1.14. “Overflow” means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.
- 1.1.15. “Process wastewater” means water directly or indirectly used in the operation of the animal feeding operation for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other animal feeding operation facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.
- 1.1.16. “Production area” means that part of an animal feeding operation that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.
- 1.1.17. “Producer” means the owner or operator of the concentrated animal feeding operation.
- 1.1.18. “Secretary” means the Secretary of the South Dakota Department of Environment and Natural Resources, or authorized representative.
- 1.1.19. “Shall” means that the condition is an enforceable requirement of this permit.
- 1.1.20. “Should” means that the condition is a recommendation of the Secretary. If violations of the enforceable requirements of this permit occur, the Secretary will evaluate whether the producer implemented the recommendations contained in this permit that may have helped the producer to avoid the violation.
- 1.1.21. “Vegetated buffer” means a narrow, 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. Vegetated buffer areas are maintained and can be harvested if applicable.

1.1.22. “Waters of the state” means all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, but not waste treatment ponds or lagoons designed to meet the requirements of the CWA other than cooling ponds as defined in 40 CFR 423.11 (m)(July 1, 1991).

## **1.2. How to Obtain Coverage Under This Permit.**

### 1.2.1. Applicability of General Permit.

1. Concentrated animal feeding operations have a duty to seek coverage under a surface water discharge permit. This permit is a surface water discharge permit applicable to all animal feeding operations that meet the definition of a concentrated animal feeding operation or if a local level of government requires the producer to obtain coverage under this permit. Once an operation is defined as a concentrated animal feeding operation, the permit requirements for concentrated animal feeding operations apply to all animals in confinement at the operation with respect to all manure, litter, and process wastewater generated by those animals or the production of those animals, regardless of the type of animal.
2. All producers that own or operate concentrated animal feeding operations and submit a permit application to the Secretary on or after the effective date of this permit shall obtain coverage under this permit and operate the feeding operations in compliance with the terms and conditions of the permit.
3. The Secretary encourages feeding operations that do not meet the definition of a large concentrated animal feeding operation to request coverage under this permit or voluntarily comply with the terms and conditions of the permit. This will make it easier for the producer should the producer want to expand the animal feeding operation and then be required to obtain coverage under this permit.

1.2.2. Permit Coverage. This section describes the permit application requirements. Included in the section are the application requirements for all operations, new or expanding operations, existing operations required to get permit coverage, training requirements, the process for maintaining coverage under the general permit, the public notice process, and the mailing address for submitting a permit application.

1. All Operations. The following information must be submitted for all concentrated animal feeding operations applying for permit coverage:
  - a. The legal name and address of the owner and operator (if different than owner);
  - b. The facility location and mailing addresses;
  - c. Latitude and longitude of the production area (entrance to production area);
  - d. A topographic map or other map if a topographic map is unavailable, extending one mile beyond the property boundaries of the operation and showing the specific location of the production area;

- e. Specific information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, geese, other);
  - f. The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage (tons/gallons);
  - g. The total number of acres under control of the applicant available for land application of manure, litter, or process wastewater;
  - h. Estimated amounts of manure, litter, and process wastewater generated per year (tons/gallons); and
  - i. Estimated amounts of manure, litter and process wastewater transferred to other persons per year (tons/gallons).
2. New or Expanding Operations. New or expanding operations are those commencing construction on or after February 12, 2003. Expanding operations are those operations expanding the maximum number of animals at the facility.
- a. In addition to the items required by Section 1.2.2.1., the producer shall submit an application which contains the following information to the Secretary at least 60 days prior to construction:
    - 1) Plans and specifications for the manure management system;
    - 2) A Nutrient Management Plan developed in accordance with Section 1.4.4.;
    - 3) An Operation and Maintenance Guideline signed by the owner; and
    - 4) A Certification of Applicant Form.
  - b. The plans and specifications shall be sealed, signed, and dated 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.
  - c. The plans and specifications, nutrient management plan, and operation and maintenance guideline shall include all necessary items to show that the manure management system will meet all the terms and conditions of this permit once constructed.
  - d. If the Secretary determines that the manure management system, plans and specifications, nutrient management plan, and operation and maintenance guideline meet the terms and conditions of this permit, the Secretary will issue an approval letter with or without conditions. It is a violation of this permit if the producer does not follow the conditions of the Secretary's approval.
  - e. If the Secretary denies an application, the Secretary shall give written notice of the denial to the applicant giving the applicant 30 days to request in writing a hearing before the Secretary. The Secretary may affirm, modify, or reverse the initial decision based upon evidence presented at the hearing.

- f. Approval from the Secretary authorizes the producer to proceed with construction of the manure management system. Starting construction of the manure management system before receiving Secretary approval is a violation of this permit.
  - g. Upon completion of construction, the producer shall submit a Notice of Completion (Appendix A) to the department that has been completed by a South Dakota licensed professional engineer or the U.S. Department of Agriculture - Natural Resources Conservation Service.
  - h. After verifying that the manure management system was constructed in accordance with the approved plans and specifications, the Secretary will issue a Certificate of Compliance, a letter informing the producer of when coverage under this permit begins, and a copy of this permit. Permit coverage allows the producer to begin using the manure management system in accordance with the conditions of this permit.
  - i. If a concentrated animal feeding operation, with approved plans and specifications under the previous permit, did not commence construction prior to February 12, 2003, a revised nutrient management plan meeting the requirements in Section 1.4.4. of this permit must be submitted. New swine, veal and poultry operations, must also submit a revised permit application showing the manure containment capacity requirements in Section 1.4.3.2. of this permit can be met.
3. Existing Operations Required to Obtain Permit Coverage.
- a. The Secretary will send operations with permit coverage under the previous permit a Notice of Intent for Coverage form. The form will contain an application deadline.
  - b. Operations existing prior to February 12, 2003, without previous permit coverage must submit a nutrient management plan in accordance with Section 1.4.4. These operations must implement the nitrogen based nutrient management plan immediately but have until December 31, 2006, to implement the phosphorus based nutrient management plan requirements, unless the operation expands.
  - c. Upon receipt of a signed complaint the Secretary will determine whether an existing animal feeding operation is a concentrated animal feeding operation and needs to obtain coverage under this permit. After conducting an inspection in response to the complaint, the Secretary will notify the producer of the department's findings of the inspection and whether coverage under this permit is required. A producer who owns or operates an existing animal feeding operation may also voluntarily apply for coverage under this permit.
  - d. The Secretary will use the following criteria to determine the items a producer with an existing feeding operation must submit to obtain approval under this permit:
    - 1) Open or housed lot without a manure management system. The process to obtain permit coverage is the same as the process described in Section 1.2.2.2. for new or expanding operations starting on page 7 of this permit.
    - 2) Open or housed lot with a manure management system built prior to August 14, 1996, without prior department approval.
      - a) The producer shall submit an application, which contains the following information:



- i. Documentation prepared by a South Dakota licensed professional engineer or the Natural Resources Conservation Service showing the size and shape of the manure containment structure, the calculated capacity of the structure, and the existing or proposed location and elevation of the permanent marker. The producer shall also submit any information that is available detailing the construction of the existing structure to include as-built drawings, cross-sectional views of the structure, location and type of piping, etc;
  - ii. Notice of Intent to Obtain Permit Coverage Form;
  - iii. A Nutrient Management Plan;
  - iv. An Operation and Maintenance Guideline signed by the owner; and
  - v. A Certification of Applicant Form.
- b) If the existing manure containment structure cannot contain 180 days of manure storage plus the 25-year, 24-hour storm, the producer shall submit plans and specifications for a new manure containment structure. The 25-year, 24-hour storm requirement is not applicable for a totally enclosed concentrated animal feeding operation with an enclosed storage structure. The new structure or new structure used in combination with an existing manure containment structure must have at least 270 days of storage plus room for the 25-year, 24-hour storm. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design.
- c) Continued use of existing manure containment structures constructed prior to August 14, 1996:
- i. If the producer intends to continue using an existing manure containment structure constructed prior to August 14, 1996, the producer shall provide documentation the structure meets the seepage or permeability requirements in Section 1.4.3.4. of this permit if the structure meets one of the following criteria:
    - (1) There is visible evidence of seepage from the containment structure;
    - (2) The containment structure is located over a mapped shallow aquifer shown in Appendix F of this permit or other shallow aquifers identified in reports published by the South Dakota Geological Survey;
    - (3) The manure containment structure is located within 150 feet of a river or lake classified in the state surface water quality standards (ARSD 74:51:02 and 74:51:03) as a warm water fishery, cold water fishery, or a domestic water supply; and
    - (4) Impacts to private or public water supplies from the existing manure containment structure have been documented or if the existing manure containment structure is less than 250 feet from a well owned by someone other than the producer or 1,000 feet from a well used as a public water supply.

The requirements of this section (1.2.2.3.d.2)c.i.) do not apply to any existing manure containment structure that does not meet any of the four criteria listed above, a manure containment structure constructed from concrete, or any structure with a synthetic liner. If a structure is built with concrete or has a synthetic liner and there are visible signs of leakage, the producer must include in the application a plan to repair the structures to stop the leakage.

- ii. Documentation that shall be submitted as part of the application for producers required to submit documentation shall show that the seepage or permeability requirements of this permit can be met for the existing manure containment structure. Options available to meet this requirement include the following:
  - (1) Permeability tests of in-situ samples from soil borings along the perimeter of the structure. The drilling logs and elevation of the top of the borings must be provided. There must be at least two soil borings for each manure containment structure. The in-situ samples must be taken from the boring at the approximate elevation of the pond bottom. The borings must be drilled on the side of the structure that has visible leakage, nearest to the river or lake, or adjacent well (see items (1),(3), and (4) in item c)i. starting on page 9);
  - (2) Permeability tests of in-situ samples taken from the sides and bottom of the manure containment structure. One test must be conducted on each side of the dike and at least one per acre of manure containment structure bottom area. Outside pond perimeter in-situ sampling will be considered if a sampling plan is first submitted to the department for approval;
  - (3) Long-term measurements of the level of manure in the containment structure considering evaporation and other losses or gains to the waste volume in the structure;
  - (4) Plans and specifications for the existing manure containment structure that show in detail how the liner of the containment structure was constructed; or
  - (5) Other methods that can be shown to reliably predict the seepage or permeability of an existing manure containment structure.
- iii. If the documentation shows that the existing manure containment structure cannot meet the seepage or permeability requirements of this permit, the producer shall submit a plan to bring the manure containment structure into compliance with the conditions of this permit. Options include lining the structure with a clay liner, installing a synthetic liner, installing a bentonite layer, abandoning the existing manure containment structure and constructing a new structure in accordance with this permit, obtaining a ground water discharge permit and conducting ground water monitoring, or other options approved by the Secretary. Plans and specifications for any new construction must be submitted for review and approval by the department before construction begins.

- iv. Any plans and specifications included in the application shall be sealed, signed, and dated 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.
  - d) If the Secretary determines the plans and specifications for the new containment structure or any modifications to an existing containment structure meet the requirements of this permit, the Secretary will issue an approval letter with or without conditions. It is a violation of this permit if the producer does not follow the conditions of the Secretary's approval.
  - e) If the Secretary denies an application, the Secretary shall give written notice of the denial to the applicant giving the applicant 30 days to request in writing a hearing before the Secretary. The Secretary may affirm, modify, or reverse the initial decision based upon evidence presented at the hearing.
  - f) Approval from the Secretary authorizes the producer to proceed with construction of new manure containment structure(s). Starting construction before receiving Secretary approval is a violation of this permit.
  - g) Upon completion of construction, the producer shall submit to the department a Notice of Completion (Appendix A) that has been completed by a licensed South Dakota professional engineer or the U.S. Department of Agriculture - Natural Resources Conservation Service.
  - h) After verifying that the manure management system was constructed in accordance with the approved plans and specifications, the Secretary will issue a Certificate of Compliance, a letter informing the producer when coverage under this permit begins, and a copy of this permit.
  - i) If an existing manure containment structure that has less than 270 days of storage is permitted, the Secretary may require the producer to modify the containment structure or revise the operation and maintenance guideline if discharges of manure or wastewater occur from the containment structure in violation of this permit. This would include constructing additional storage so that the manure containment structure has at least 270 days of storage for manure and process wastewater for all animals to be permitted. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design.
  - j) An existing concentrated animal feeding operation having a manure containment system capacity less than 270 days of storage cannot increase its maximum animal numbers without first having an approved manure containment system providing at least 270 days of storage. If a concentrated animal feeding operation has more than one manure management system, then only the expanding system without sufficient capacity must have its capacity increased to have at least 270 days of storage. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design.
- 3) Open or housed lot with a manure management system built prior to August 14, 1996, with prior department approval.

- a) The producer must submit an application, which contains the following information:
    - i. The department letter approving the manure containment structure;
    - ii. Notice of Intent to Obtain Permit Coverage Form;
    - iii. A Nutrient Management Plan;
    - iv. An Operation and Maintenance Guideline signed by the owner; and
    - v. A Certification of Applicant Form.
  - b) Verification must be submitted that the manure containment structure was constructed with the storage capacity approved by the department and provide the existing or proposed location and elevation of the permanent marker.
  - c) If the application meets the requirements of this permit, the Secretary will issue an approval letter with or without conditions, a Certificate of Compliance, a letter informing the producer of coverage under this permit, and a copy of this permit.
  - d) Failure to follow any condition of the Secretary's approval is a violation of this permit.
  - e) If an existing manure containment structure that has less than 270 days of storage is permitted, the Secretary may require the producer to modify the containment structure or revise the operation and maintenance guideline if discharges of manure or wastewater occur from the containment structure in violation of this permit. This would include constructing additional storage so that the manure containment structure has at least 270 days of storage for manure and process wastewater from all animals to be permitted. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design.
  - f) An existing concentrated animal feeding operation having a manure containment system capacity less than 270 days of storage cannot increase its maximum animal number without first having an approved manure containment system providing at least 270 days of storage. If a concentrated animal feeding operation has more than one manure management system, then only the expanding system without sufficient capacity must have its capacity increased to have at least 270 days of storage. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design.
  - g) Approval from the Secretary authorizes the producer to proceed with construction of new manure containment structure(s). Any construction prior to receiving Secretary approval is a violation of this permit.
4. Large Concentrated Animal Feeding Operations located in other states and land applying manure in South Dakota. These operations must submit a permit application consisting of:
- a. Items in Section 1.2.2.1;
  - b. A nutrient management plan developed in accordance with Section 1.4.4;
  - c. A Certification of Applicant form; and

d. If stockpiling manure in South Dakota, stockpiling shall be conducted in accordance with the requirements of Section 1.4.3.4.f.

5. Natural Resource Management Training Required. A producer wanting coverage under this permit must first submit verification that the producer has attended an approved environmental training course on proper operation and maintenance of a manure management system and proper natural resource management (item x.-page 26). If a producer was permitted under the previous general permit and has already submitted verification that this training was attended does not have to submit additional verification before obtaining permit coverage. However, because of the new record keeping and reporting requirements and future changes to the nutrient management plan required by this permit, it is recommended that all owners and operators attend the training again.

1.2.3. Application for Maintaining Coverage Under the General Permit. Federal law states that a general permit is only effective for five years. At that time, the Secretary must issue another general permit. Often times, the new permit is not issued prior to the expiration of the old general permit. Therefore, to protect the permitted operations, a notice of intent needs to be submitted at least sixty (60) days prior to the expiration date of this permit. If a notice of intent is submitted within this timeframe, the Secretary can authorize permitted facilities to continue to operate under the old general permit until a new general permit can be put in place. The department will provide all permitted operations with a notice of intent at least 90 days prior to the expiration date of this permit to allow all permitted operations to timely file their notice to receive this protection. If the notice is not filed by the expiration date, the Secretary cannot extend permit coverage to the operation.

Producers need not continue to seek permit coverage or reapply for a permit if:

1. They have notified the Secretary that their operation has ceased operation or is no longer a concentrated animal feeding operation;
2. They demonstrate to the satisfaction of the Secretary there is no remaining potential for a discharge of manure, litter or associated process wastewater generated while the operation was a concentrated animal feeding operation, other than agricultural stormwater from land application areas; and
3. The Secretary has notified the producer that the operation is no longer a concentrated animal feeding operation.

1.2.4. Public Notice. The Secretary will prepare a notice for any new or expanding feeding operation that is covered by this permit. The notice will be published once in a newspaper of general circulation in the locality of the feeding operation. The producer will be responsible for paying for the 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 lands in the nutrient management plan, and where to obtain further information. Notice must appear in the newspaper at least 30 days prior to the Secretary issuing approval of the manure management system.

1.2.5. Address. Plans and specifications, nutrient management plan, operation and maintenance guideline, and the other forms necessary to obtain coverage under this permit shall be submitted to:

South Dakota Department of Environment and Natural Resources  
Surface Water Quality Program  
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501-3182  
Telephone: (605) 773-3351  
Fax: (605)773-5286

1.2.6. Responsibilities upon Authorization. Owners and operators of a feeding operation shall operate in accordance with: the approved plans and specifications; the conditions of this permit; the Best Management Practices required by this permit to be implemented; and the Best Management Practices incorporated by a producer into the Operation and Maintenance Guideline and Nutrient Management Requirements.

### **1.3. Notice of Permit Termination and Closure Requirements.**

1.3.1. The producer shall notify the Secretary if coverage under this permit is no longer necessary because the feeding operation is no longer in operation. The producer shall use the form provided in Appendix C of this permit for this notification.

1.3.2. The producer shall notify the Secretary if the permit is no longer necessary due to a change in operations and the producer no longer needs coverage under the general permit. The producer should use the form in Appendix C to provide this notification. The producer needs to list the reasons why coverage is no longer necessary for the animal feeding operation. The Secretary will review these requests on a case-by-case basis.

1.3.3. The producer is responsible for ensuring that upon closure of the animal feeding operation, all manure and wastewater has been removed and safely land applied in accordance with the terms and conditions of this permit before coverage under this permit can be terminated.

### **1.4. Permit Conditions.**

#### **1.4.1. Effluent Limits.**

1. Housed Lot. Effective immediately and lasting through the life of this permit, the producer shall have no discharge of process wastewater, or solid or liquid manure, from the concentrated animal feeding operation and the manure management system to waters of the state.

2. Open Lot. Effective immediately and lasting through the life of this permit, the producer shall have no discharge of process wastewater, or solid or liquid manure, from the concentrated animal feeding operation and the manure management system to waters of the state. The only time this permit allows a discharge from an open lot is if a chronic or catastrophic event causes an overflow from the manure containment structure. However, the containment structure shall be designed, constructed, maintained, and operated at all times in compliance with the terms and conditions set forth in this general permit. The producer shall keep rainfall records to document that a 25-year, 24-hour rainfall event occurred. New swine, poultry or veal calf operations commencing construction after February 12, 2003, must keep rainfall records to document that a 100-year, 24-hour rainfall event occurred. The producer may use an ordinary rain gauge to measure rainfall amounts.

3. Manure and Wastewater Land Application Sites. Effective immediately and lasting through the life of this permit, the producer shall implement the department approved nutrient management

requirements, operation and maintenance guidelines, and best management practices required by this permit for land application of manure and process wastewater to prevent discharge of manure or process wastewater to waters of the state.

1.4.2. Proper Operation and Maintenance. Producers shall construct, operate, and maintain the animal feeding operation in compliance with: the conditions of this permit; the approved plans and specifications; and the Best Management Practices required by this permit to be implemented. The producer shall prepare and follow an Operation and Maintenance Guideline and Nutrient Management Requirements using Best Management Practices.

1.4.3. Best Management Practices. The producer is responsible for implementing Best Management Practices to ensure compliance with the terms and conditions of this permit. The producer shall include the Best Management Practices that will be implemented at the animal feeding operation in the Operation and Maintenance Manual or Guideline and Nutrient Management Requirements. The following sections describe several Best Management Practices that may assist the producer in complying with this permit and prevent pollution. Whenever the word “shall” is used, that is a requirement of the permit that the producer must meet.

1. Location Standards. This section establishes the minimum standards the producer shall consider when selecting a site for a new concentrated animal feeding operation.

a. The producer shall contact the local planning and zoning office to determine all local requirements. The producer is responsible for complying with all local ordinances and requirements. Local governments may have setback distances, buffer zone widths, and other siting or environmental requirements established in local ordinances.

b. The producer should take every precaution to minimize the possibility of exposing the public to nuisance conditions and to prevent locating an animal feeding operation in an area unsuitable or inappropriate. Factors that the producer should consider are:

- 1) Distance to roads, homes, churches, schools, residential and recreational areas, towns, cities, etc.;
- 2) Prevailing wind direction;
- 3) Fencing the lagoon or containment structure for safety and posting signs around the structure;
- 4) Planting trees or shrubs to screen the lagoons or containment structure to help control odors and improve aesthetics; and
- 5) Distance to public and individual water supplies.

c. The producer should evaluate the design, construction, or operational features of the manure management system to minimize contamination of surface or ground waters. In making this evaluation, the producer should consider the following factors:

- 1) Soil conditions;
- 2) Depth to the aquifer;
- 3) Distance from the feeding operation to the aquifer and nearby drainages, streams, rivers, lakes, wetlands, etc.;

- 4) Ground water conditions such as ground water flow rate, quality, and aquifer recharge or discharge conditions;
  - 5) Active natural processes such as flooding, erosion, settling, submergence, etc.;
  - 6) Local weather conditions;
  - 7) Terrain slopes; and
  - 8) Wastewater or manure containment structures should not be located in wetlands. If required by federal law, the producer shall obtain a Section 404 permit from the US Corps of Engineers prior to any dredging or filling of wetlands.
- d. Wastewater or manure containment facilities should not be located over shallow aquifers. The Secretary will evaluate whether monitoring wells or a ground water discharge permit will be required on a case-by-case basis. The Secretary shall use SDCL 34A-3A-24 and the conditions of this permit to determine when a ground water discharge permit is required.
  - e. The producer shall maintain appropriate buffer zones around wastewater containment structures or lagoons or land application areas for manure disposal.
  - f. The producer should consider distances from neighbors, cities, and other residential areas. Sites proposed in areas located in predominately upwind direction from residential areas should be avoided.
2. Containment Structure Design and Storage. The producer shall construct containment structures to store the 25-year, 24-hour storm event, plus all other process wastewater and liquid and solid manure. New swine, poultry and veal calf operations commencing construction after February 12, 2003, shall construct containment structures to store the 100-year, 24-hour storm event plus all other process wastewater and liquid and solid manure. The containment structures shall be designed and constructed in accordance with good engineering and construction practices. The producer shall incorporate the following design characteristics into the containment structure.
    - a. The freeboard shall not be less than two feet for any containment structure constructed with earthen materials. The freeboard shall not be less than one foot for any containment structure constructed with concrete. Freeboard is measured from the high water mark to the bottom elevation of the emergency spillway, or lowest part of the dike or containment structure. The high water mark is the elevation in the containment structure necessary to contain the designed storage of accumulated manure and process generated wastewater, and the 25-year, 24-hour rainfall event or 100-year, 24-hour storm event for new swine, poultry and veal calf operations. For new swine, poultry and veal calf operations approved prior to the effective date of this permit, up to one foot of freeboard may be used to meet the 100-year, 24-hour storm event capacity. A producer with plans and specifications approved for a new swine, poultry, or veal operation, prior to the effective date of this permit but did not commence construction until February 12, 2003, or later, shall submit verification of the revised manure containment capacity and a revised marker elevation prior to obtaining permit coverage.
    - b. A containment structure or lagoon for an open lot may be constructed with an emergency spillway or overflow channel to remove water in a controlled manner when the capacity of the containment facility is exceeded. If present, the emergency spillway shall be designed to safely pass the flow expected from at least the 25-year, 24-hour storm event.



- c. Uncontaminated storm water runoff shall be diverted away from the containment structure whenever possible.
- d. Confined animals shall be prevented from contacting waters of the state.
- e. Ditches, dikes, berms, terraces, or other such structures shall be used to divert peak flows to the containment structure or lagoon. These structures shall be designed to carry the peak flow expected during the 25-year, 24-hour rainfall event.
- f. If applicable, permanent markers (measuring devices) shall be maintained in the containment structure to show the volume required to contain a 25-year, 24-hour rainfall event or 100-year, 24-hour storm event for new swine, poultry and veal calf operations.
- g. A minimum of one marker is required at the maximum operating level of each containment structure (see Appendix H). The measuring device can also be used to determine the amount of solid or liquid manure in the lagoon or the amount of manure that will be applied during land application.
- h. Manure and wastewater 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 lagoon or basin embankment shall be constructed at least one foot above the elevation of the 100-year flood.
- i. Wastewater containment structures or the manure and wastewater disposal sites shall not be located closer than 1,000 feet from an existing public water well or drinking water source nor 250 feet from an existing private water well or drinking water source. Wastewater containment structures and the manure and wastewater disposal sites shall not be located closer than 150 feet from a water well or drinking water source that is owned by the producer. These setback requirements do not apply to wastewater and manure containment structures constructed prior to August 13, 1996.
- j. Manure containment structures shall provide for a minimum design capacity of 270 days of manure storage for housed lots. Open lot design shall provide 365 days of storage to account for annual precipitation volume necessary in the design. This section does not apply to manure stockpiling areas as described in item f. on page 21. The design volume includes the following:
  - 1) Liquid and solid manure and process generated wastewater;
  - 2) Process wastewater to include the mean annual runoff and annual precipitation on the pond if the structure receives runoff from the lots or pens;
  - 3) Normal precipitation less evaporation on the pond surface. The amount of evaporation used in this calculation will be no more than the amount shown on the Mean Annual Lake Evaporation map, U.S. Weather Bureau Technical Paper Number 37 (or other reference approved by the Secretary);
  - 4) 25-year, 24-hour precipitation on pond surface and runoff (if structure receives runoff from an open lot). New swine, poultry and veal calf operations shall use the 100-year, 24-hour precipitation on the pond surface and runoff;

- 5) Additional water necessary to meet volatile solids loading or other loading rates specified in item q. below, if the structure is an anaerobic, naturally aerobic or mechanically aerated lagoon; and
  - 6) Residual Volume. An allowance of at least one foot shall be provided in the bottom of the containment structure to accommodate materials that are not removed during emptying.
- k. If applicable, the South Dakota Dam Safety requirements in ARSD Chapter 74:02:08 shall be met for construction of lagoons. A lagoon shall meet these regulatory requirements if the lagoon is at least 25 feet high and holds more than 15 acre-feet of water; or holds more than 50 acre-feet of water and is over 6 feet high. If manure containment structures are regulated by the above requirements, they must be designed and constructed with a spillway that is placed at the maximum freeboard elevation as required in Section 1.4.3.2.a.
  - l. Interior and exterior slopes of earthen embankment walls of containment structures shall be no steeper than one foot vertical to three feet horizontal.
  - m. Earthen embankments of any containment structure shall have a top width of at least 10 feet.
  - n. Any earthen containment structure having a surface area of five acres or more at maximum operating level (see Appendix H for maximum operation level description) shall be provided with erosion protection. If a department inspection indicates that significant dike erosion is occurring on earthen containment structures having a surface area of less than five acres, the department may require that the erosion be repaired and erosion protection be installed in those areas subject to erosion.
  - o. The producer should take precautions while agitating the pond to ensure that the liner is not damaged.
  - p. Animal mortalities shall be handled to prevent the discharge of pollutants to surface water. Unless plans and specifications approved by the Secretary are for systems specifically designed to handle mortalities, liquid manure or process wastewater systems cannot be used for the disposal of mortalities. Proper animal mortality is regulated by the South Dakota Animal Industry Board [(605) 773-3321].
  - q. The majority of manure management system designs are for retention holding ponds. Occasionally designs are submitted for alternative systems designed for wastewater treatment. The design requirements for treatment systems will be reviewed on a case-by-case basis. However, the following requirements for typical treatment systems are as follows:
    - 1) Anaerobic lagoons. The design shall be based on volatile solids loading. The loading rate for an anaerobic lagoon shall not exceed 3.0 pounds of volatile solids per 1,000 cubic feet of pond volume. Loading rates less than 3.0 pounds are allowed. The minimum depth of liquid shall be 6 feet;
    - 2) Naturally aerobic lagoons. The design shall be based on daily biochemical oxygen demand (BOD<sub>5</sub>) loading per acre of lagoon. The loading rate for an aerobic lagoon shall not exceed 25 pounds of biochemical oxygen demand (BOD<sub>5</sub>) per acre of lagoon per day. Loading rates less than 25 pounds are allowed. The maximum depth of liquid shall be five feet; and

- 3) Mechanically aerated lagoons. The aeration equipment shall provide a minimum of one pound of oxygen for each pound of biochemical oxygen demand (BOD<sub>5</sub>) per day. The minimum depth of liquid shall be 6 feet.
3. Surface Water Protection. The producer shall construct, manage, and maintain the manure management system in a manner to prevent pollution of surface waters of the state. The following is a list of practices to help ensure compliance with the permit and protect surface water quality. The producer shall include a list of practices in the operation and maintenance guideline that the producer shall follow to ensure protection of surface water. In developing the operation and maintenance guideline, and in operating the facility, the producer shall comply with all mandatory best management practices and may use any or all of the recommended best management practices noted below:
- a. Practices to decrease the lot runoff and water volume are as follows:
    - 1) Divert runoff from clean areas above lot by constructing ditches, terraces, and waterways above an open lot;
    - 2) Install gutters, downspouts, and buried conduits to divert roof drainage;
    - 3) Provide more roofed area;
    - 4) Decrease open lot surface area;
    - 5) Repair or adjust waterers and water systems to minimize water wastage;
    - 6) Use practical amounts of water for cooling purposes; and
    - 7) Recycle water if practical and applicable.
  - b. Practices to decrease the potential of discharging manure and process wastewater to surface waters are as follows:
    - 1) Collect manure more frequently;
    - 2) Eliminate or modify areas that slope in directions such that wastewater or rainfall runoff cannot be collected;
    - 3) Collect and allow wastewater to evaporate;
    - 4) Collect and evenly apply wastewater and manure to land only during dry weather;
    - 5) Do not stockpile manure within 200 feet of a natural or manmade drainage and stockpile in accordance with requirements of Section 1.4.3.4.f.;
    - 6) Avoid land that is susceptible to excessive water erosion; and
    - 7) Use off-site areas for manure application consistent with Best Management Practices, good agricultural practices, and the Nutrient Management Plan.
  - c. If applicable, the producer should remove manure that accumulates along holding pens or open lot fence lines, in feeding lanes, and feed storage areas to prevent a change in drainage or loss of manure outside the containment area.

- d. Chemicals and other contaminants handled on-site shall not be disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
4. Ground Water Protection. The producer shall take every precaution to prevent migration of pollutants to the ground water. The following best management practices shall be followed to ensure protection of ground water:
    - a. All new or modified wastewater containment structures that have liners constructed of compacted or in-situ earthen materials shall meet the following minimum requirements:
      - 1) Material used for the clay lining shall be either CL or CH Unified Classification. Liner materials shall contain no frozen material, ice, snow, sod, brush, roots, or other perishable materials, or rocks larger than four inches in diameter. No liner shall be placed on a frozen surface (Reference: NRCS Construction Specifications SD-34 Clay Lining, 9/02);
      - 2) Earthen liners shall be a minimum of 18 inches thick and placed in approximately equal horizontal layers. Each layer shall not exceed six inches for machine compaction. Each layer adjacent to structures shall not exceed four inches for hand-directed power tampers (Reference: NRCS Construction Specifications SD-34 Clay Lining, 9/02);
      - 3) Hydraulic conductivity equal to or less than  $1 \times 10^{-7}$  centimeters per second (cm/sec) or a maximum seepage rate of 1/16 inch per day at maximum operating depth;
      - 4) Soil compaction for liners shall be constructed at 95 percent of standard proctor density at optimum moisture content plus or minus two percent or according to the recommendations of the soils testing laboratory;
      - 5) Testing must be conducted to ensure proper construction of the liner. There shall be a minimum of four density tests (compaction tests) conducted on each six inch lift. For ponds larger than two acres, there shall be two additional density tests for each acre over two acres for each six inch lift. Example: For a pond liner three acres in size, there would be a minimum of six density tests conducted on each six inch lift. In lieu of conducting the density tests, there shall be a minimum of two permeability tests conducted on the completed liner. For ponds larger than two acres, one permeability test shall be conducted for each acre of liner. The results of either testing procedure must show that the proper compaction was achieved and the permeability requirements of this permit have been met. The locations of the tests must be random and equally distributed over the liner bottom and inside embankments. The testing results and locations must be submitted to the Secretary along with the notice of completion form; and
      - 6) A minimum thickness of compacted soil liners of 1.5 feet on the bottom and sides after compaction.
    - b. If applicable, pipe leakage test records shall be retained and available upon request.
    - c. If the earthen containment structure or lagoon cannot meet the requirements in item 1) above, then an alternative lining material shall be used. These liners must meet or exceed the hydraulic conductivity requirements in item 1.4.3.4.3) above. Alternative liner materials include flexible membrane linings, asphalt-sealed fabric liners, and bentonite sealants.

- d. Containment structures may be constructed with concrete. These structures shall be properly designed using adequate structural reinforcement to minimize cracking of the concrete and to ensure the structural integrity of the containment structure. These structures shall also be properly designed to minimize or prevent seepage or leakage. Acceptable standards for concrete design are found in the following sources:
- 1) Midwest Plan Service (MWPS-36) *Concrete Manure Storage Handbook* (1994 Edition) available from the Extension Service;
  - 2) American Concrete Institute Standards 318-89 (Rev. 1992) *Building Code Requirements for Reinforced Concrete*; and
  - 3) American Concrete Institute Standards 350R-89 and 350IR-93/AWWA (1994) *Environmental Engineered Concrete Structures*.
- e. Livestock shall be prohibited entry into new earthen containment structures or on its dikes, and the immediate surrounding area to ensure protection of the liner. Existing operations with unique animal access issues will be addressed on a case-by-case basis.
- f. If stockpiling of manure is a usual practice at an animal feeding operation, the producer shall:
- 1) Stockpile manure within the area where manure and process wastewater is directed to the containment structure or in a covered building;
  - 2) Construct a permanent designated stockpiling site. The manure stockpiling area must be designed to accommodate the normal manure stockpiling practices implemented at the animal feeding operation. The stockpile shall include a liner that minimizes seepage and dikes to keep runoff away from the stockpile and to contain runoff from leaving the stockpile. An accepted alternative to lining the area is to conduct permeability tests on the in-situ soils. If the in-situ soils can meet the accepted hydraulic conductivity of  $1 \times 10^{-7}$  centimeters per second (cm/sec), a liner will not be required;
  - 3) Temporarily stockpile manure for less than 14 days in an area that will not cause pollution to waters of the state. The temporary stockpile shall be located at least 200 feet from a natural or manmade drainage and the in-situ soils shall meet the hydraulic conductivity of  $1 \times 10^{-7}$  centimeters per second (cm/sec). The temporary stockpiling areas shall be identified in the initial nutrient management plan or amendment to the plan. The producer should consider moving temporary stockpiles to different locations. The producer shall keep records of the date the manure was placed at the temporary stockpiling site and the date it was land applied;  
or
  - 4) Temporarily stockpile manure for longer than 14 days up to 90 days in a temporary stockpile with an impermeable cover. The temporary stockpile shall be located at least 200 feet from a natural or manmade drainage and the in-situ soils shall meet the hydraulic conductivity of  $1 \times 10^{-7}$  centimeters per second (cm/sec). The temporary stockpiling areas shall be identified in the initial nutrient management plan or amendment to the plan and must describe how the stockpiles will be covered. The producer should consider moving temporary stockpiles to different locations. The producer shall keep records of the date the manure was placed at the temporary stockpiling site and the date it was land applied.

- g. Wastewater and manure containment structures or the manure and wastewater application sites cannot be located closer than 1,000 feet from an existing public water well or drinking water source nor 250 feet from an existing private water well or drinking water source. Wastewater and manure containment structures and the manure and wastewater application sites shall not be located closer than 150 feet from a water well or drinking water source that is owned by the producer. These setback requirements do not apply to wastewater and manure containment structures constructed prior to August 14, 1996.
- h. The Secretary will determine on a case-by-case basis whether animal feeding operations covered by this permit are located over shallow aquifers (see item j. below). If so, the Secretary may require a minimum of three ground water monitoring wells be installed. If ground water monitoring is required, a South Dakota-licensed well driller must install the wells.
- i. The producer shall sample the ground water in the monitoring wells on a quarterly basis (January, April, July, and October) for the following parameters:
  - 1) Total dissolved solids;
  - 2) Sulfate, Dissolved;
  - 3) Nitrate as Nitrogen;
  - 4) Ammonia - Nitrogen, Dissolved  $\text{NH}_4 + \text{NH}_3$  as N;
  - 5) Chloride, Dissolved; and
  - 6) Water table elevations.

The producer shall submit the monitoring well data by January 31 of each year, or more frequently if required by the Secretary, to the following address:

Department of Environment and Natural Resources  
523 E. Capitol  
Pierre, SD 57501-3182  
Telephone: (605)773-3296  
Fax: (605)773-6035

If the ground water is not impacted after one year of sampling, the producer may request the Secretary to reduce the monitoring frequency. However, if the ground water is affected, the Secretary may require more frequent monitoring and reporting, ground water remediation, additional sampling parameters, or a ground water discharge permit.

- j. Depending on site conditions, the Secretary may require the producer to obtain a Ground Water Discharge Permit or may require the producer to conduct ground water monitoring. The Secretary will use the criteria listed in 1) through 3) below and SDCL 34A-3A-24 to determine if a feeding operation is located over a shallow aquifer. If a feeding operation is located over a shallow aquifer, the Secretary shall use the criteria listed in Appendix G of this permit to determine whether a ground water discharge permit or ground water monitoring is required.

If an animal feeding operation site meets one or more of the following criteria, the producer shall begin ground water monitoring or obtain a ground water discharge permit before storing

manure. At least one round of samples shall be collected from the monitoring wells before storing manure in new manure management systems, to determine background ground water quality conditions. The criteria are as follows:

- 1) The feeding operation is located over a mapped shallow aquifer. County studies and other information shall be used, where available, to determine aquifer locations. Aquifer boundaries are drawn at the discretion of geologists and hydrologists based on best available information. Therefore, actual site specific aquifer boundaries may differ from mapped aquifer boundaries and other information. On-site hydrogeologic information is necessary to verify the location of a feeding operation in relation to an underlying shallow aquifer;
  - 2) The feeding operation is located over an aquifer not shown on the map in Appendix F, and meets one of the following criteria:
    - i. The aquifer is within 50 feet or less below the land surface with 15 feet or less of continuous, overlying, extremely low permeability, geologic material such as unweathered clayey till or shale. Weathered till or highly fractured/weathered shale is not considered to be extremely low permeability material;
    - ii. The aquifer is greater than 50 feet but less than 100 feet below the land surface with 30 feet or less of continuous overlying low to extremely low permeability geologic material that may be a combination of weathered and unweathered till, shale, or till and shale; or
    - iii. The aquifer is greater than 100 feet below the land surface, the vulnerability will be determined on a case-by-case basis.
  - 3) As determined by the Secretary on a site-by-site basis.
- k. The producer must provide the drilling logs and the elevation of the top of the boring from soil borings in the vicinity of the containment structure. The elevation shall be relative to the elevation submitted on the manure containment system plans. There shall be a minimum of two soil borings or at least one boring per acre of containment structure surface area at the maximum operating level (see Appendix H). All borings shall be within 200 feet of the proposed location of the containment structure, and all borings shall extend to a depth of at least six feet below the bottom of the containment structure. At least one of these borings must be a deep subsurface boring characterizing the subsurface hydrogeology by using continuous in-situ undisturbed core samples collected from the deep boring. All borings must be plugged in accordance with the state Well Construction Standards - Administrative Rules of South Dakota 74:02:04. The deep subsurface boring shall extend to a minimum of 25 feet below the ground surface and may stop when one of the following criteria has been met:
- 1) At least 15 continuous feet of extremely low permeability, geologic material (unweathered clayey till or shale) is encountered in the boring;
  - 2) At least 30 continuous feet of low to extremely low permeability, geologic material (weathered or unweathered till or shale) is encountered, if the boring is greater than 50 feet in depth;
  - 3) The boring reaches an aquifer or bedrock; or

4) A total depth of 100 feet.

#### 1.4.4. Nutrient Management Requirements.

##### 1. Applicability.

- a. New and expanding operations with construction starting on or after February 12, 2003, must follow the nutrient management requirements in Section 1.4.4. and submit a nutrient management plan with the permit application for department review and approval.
- b. Operations existing prior to February 12, 2003, without previous permit coverage must follow the nutrient management requirements in Section 1.4.4. and submit a nutrient management plan with the permit application for department review and approval. However, these operations may use a nitrogen based nutrient management plan until December 31, 2006, when the phosphorus based portion of the nutrient management plan will become effective.
- c. Operations existing prior to February 12, 2003, with previously approved nitrogen-based nutrient management plans, may continue to implement the approved plan using the buffer zone requirements in Section 1.4.4. A revised nutrient management plan, in accordance with Section 1.4.4., must be submitted to the department for review and approval by July 1, 2006. This plan shall be implemented by December 31, 2006.

##### 2. Best Management Practices for Land Application of Manure. The producer is responsible for the safe land application of manure and process wastewater generated at the animal feeding operation. The producer shall comply with all mandatory best management practices listed below, and may use any or all of the recommended best management practices to ensure compliance with this permit and prevent pollution.

- a. The producer may apply manure for the purpose of growing crops.
- b. The producer shall develop, maintain, and follow a nutrient management plan to ensure safe disposal of manure and process wastewater and protection of surface and ground water.
- c. The Secretary must approve the nutrient management plan submitted with the permit application before land application of any manure and process wastewater.
- d. The initial nutrient management plan is a planning document to ensure the producer has enough land available to apply generated manure and process wastewater.
- e. The Department of Environment and Natural Resources and the Natural Resources Conservation Service have a Microsoft Excel spreadsheet available to assist with developing an initial nutrient management plan. The producer may use other initial planning tools provided the alternate plan contains all the information necessary to determine compliance with conditions of this general permit.
- f. Containment structures shall be equipped with irrigation, evaporation, liquid removal systems, a combination of these systems or the producer shall provide documentation pumping equipment will always be available if needed. These systems shall be capable of dewatering the containment structures for proper land application. The producer shall maintain freeboard in the manure containment structure at all times as required by Section 1.4.3.2.a. on page 16 of this permit. The producer shall restore the storage capacity necessary



to contain the 25-year, 24-hour rainfall event or 100-year, 24-hour rainfall event for new swine, poultry and veal calf operations, within 14 days of any rainfall event or accumulation of manure or process wastewater that results in storage above the maximum operating level of the containment structure. If soil moisture conditions do not allow land application of manure or process wastewater within 14 days, the producer shall contact the department to discuss restoring the storage capacity of the containment structure. The maximum operating level is the elevation in the containment structure necessary to contain the designed storage of accumulated manure and process generated wastewater and any solids accumulation (see Appendix H). Producers that operate open lots shall have access at all times to equipment capable of dewatering the containment structures.

- g. The producer shall dispose of solids, sludges, manure, or other pollutants in a manner to prevent pollution of surface or ground water.
- h. Any permanent or temporary piping used to transfer manure to the irrigation system shall be designed, constructed and operated so liquid manure is not discharged to waters of the state at any time during start-up, operation, and shut down.
- i. The producer shall maintain at least a 100-foot buffer zone or 35-foot vegetated buffer between
  - 1) any manure land application areas and any natural or manmade drainage;
  - 2) any manure land application areas and open tile line intake structures or other conduits to surface water; and
  - 3) any irrigation of process wastewater and any natural or manmade drainage.

Depending on the results of a producer's soil phosphorus test and estimated field erosion, a 100-foot vegetated buffer zone shall be required if the producer wants to apply manure based on the nitrogen needs of the crop and not crop removal of phosphorus (see Table 2 on page 29).

- j. Fields should be diked or terraced to prevent the release of applied wastewater.
- k. Land to be irrigated or receive manure should have a slope less than 6%.
- l. Highly erodible soils due to water erosion should be avoided.
- m. Irrigation practices should be managed to prevent ponding of wastewater on the land application site.
- n. Application of manure shall not exceed the water storage capacity of the soil.
- o. Process wastewater or manure shall not be spray irrigated on frozen ground.
- p. Surface broadcast, injection, or incorporation of liquid manure or process wastewater should not be applied on frozen or snow-covered ground. If application to frozen or snow-covered ground is absolutely necessary, the producer should notify the department prior to application so the department may review buffer zone requirements with the producer and respond to inquiries from the public. The producer shall only apply liquid manure or process wastewater on land with slopes less than 4%. The producer shall also maintain a minimum of a 100-foot buffer zone to any natural or manmade drainage.

- q. All permanent manure stockpiles should be removed and land applied as soon as practicable. Example-When land is available or when stockpiling area is full.
  - r. Application of dry or solid manure on frozen or snow-covered ground should be avoided. If manure will be applied to frozen or snow-covered ground, the producer shall only apply manure on land with slopes less than 4%. The producer shall also maintain a minimum of a 100-foot buffer zone to any natural or manmade drainage.
  - s. To allow for normal winter operation in open lots, snow containing some manure removed from the concentrated animal feeding operation may be land applied and shall be placed on land with slopes less than 4%. The producer shall also maintain a minimum of a 100-foot buffer zone to any natural or manmade drainage.
  - t. Spray irrigation is allowed for land application of manure provided the producer incorporates the manure within 24 hours of application.
  - u. The producer shall inject, or incorporate any liquid manure or wastewater within 24 hours of application to nonvegetated cropland. If the manure is surface broadcast to cropped fields, grass, alfalfa, pasture land, or no till cropland, incorporation is not required.
  - v. The producer shall incorporate any solid or semi-solid manure within five days of application to nonvegetated cropland. If the application area is a cropped field, alfalfa, grass, pasture land, or no till cropland, incorporation is not required.
  - w. A producer may apply manure to property owned by other persons upon obtaining a written agreement from the property owner. Any lands owned by other persons that will be used for manure application shall be identified in the initial nutrient management plan. The producer shall be responsible for ensuring that the application of manure to the other person's property is in compliance with the terms and conditions of this permit and the nutrient management plan. Prior to such an application, a producer shall provide the person with a copy of the soil and manure test results and manure application rate calculation performed by the producer in accordance with the requirements of Sections 1.4.4.3. and 1.4.4.4. of this permit and a list of possible best management practices to ensure protection of surface and ground water.
  - x. Training and education. The producer shall participate in an approved environmental training program on proper operation and maintenance of a manure management system and proper natural resource management. Anyone wishing to provide an approved environmental training program must submit an outline of the training program to the Secretary for approval. Upon request, the Secretary will provide producers with a listing of approved environmental training programs. The producer shall submit training verification prior to receiving a Certificate of Compliance and coverage under this permit.
3. Initial Nutrient Management Plan Requirements for Permit Application. The initial nutrient management plan shall contain and address the following items:
- a. General information on local requirements and whether the producer has complied with those requirements.
  - b. The maximum amount of livestock that will be confined.
  - c. The average weight of the animals through the production cycle for all types of animals raised.

- d. An estimate of the total nitrogen and phosphorus in pounds that will be available for crop production. The producer may use either estimated nutrient concentrations for the animal manure or nutrient concentrations from laboratory analysis. If laboratory analysis is conducted, the analysis shall be included with the plan. If estimated concentrations are used to determine the total nutrients available, the source of the estimated concentrations of nitrogen for the animal manure shall be provided.
- e. The total number of days of storage in the manure containment structure(s).
- f. An estimate of the daily and annual amount of manure produced in tons of wet manure.
- g. The type or types of manure containment structures.
- h. The method(s) of manure application.
- i. The initial nutrient management plan shall include the proper mineralization rates for subsequent years of manure and process wastewater application to account for the potential buildup of nitrogen.
- j. The legal description of all fields to be used for land application, the crop to be planted on each field, the number of acres in each field, and whether the field is irrigated. Land identified or classified as wetlands, lakes, rivers, or streams, farmsteads, tree belts, or other buffer zones that cannot or will not be used for manure application shall not be included in the total number of acres available for land application. Wetlands may be used on a case-by-case basis if they are farmable and it would be a normal practice to apply fertilizer to them without impacting surface or ground water. Also, if either this permit or local governments require setback distances or buffer zones, areas within those buffer zones shall be identified on the field maps and cannot be included in the total number of acres.
- k. A copy of each written agreement executed with the owner of the land where manure will be applied. The written agreement shall indicate the acres that manure from the animal feeding operation may be applied and the length of the agreement. The producer shall ensure that there is enough land to apply manure consistent with the approved initial nutrient management plan.
- l. A detailed map showing the outline of each field listed in item j. above and all buffer zones and separation distances required by this permit.
- m. A soils map for the land application fields and a description of the predominate soil type(s) for each field.
- n. Realistic yield goals for each field and crop listed in item j. above. Yield goal calculations for initial nutrient management planning shall be determined from yields established for purchasing multi-peril crop insurance; proven yields on a field-by-field or farm-by-farm basis; or the South Dakota Agricultural Statistics Service using the published continuous five-year average yield plus ten percent. Proof of field-by-field or farm-by-farm yields shall be based on an average of actual crop receipts from a minimum of three consecutive years. If there is no information available for a crop and field listed in the nutrient management plan, documentation from the local extension service agronomy educator shall be included in the plan specifying that the yield is realistic for that crop in that area.
- o. Times of the year that land application is planned.

- p. The results of a representative 0 to 6 inch soil phosphorus test from each field included in the nutrient management plan. To get a representative sample, a minimum of 15 soil sample cores shall be taken from each field or landscape position to determine the soil test phosphorus in the field.
- q. Identify the annual average soil loss value for sheet and rill erosion for each field to be included in the nutrient management plan using the most current soil loss prediction technology used by the South Dakota Natural Resources Conservation Service. References can be found in the South Dakota Natural Resources Conservation Service Field Office Technical Guide, Section 1, Erosion Prediction at the following web site: <http://efotg.nrcs.usda.gov/> or local Natural Resources Conservation Service office. The soil loss number may be adjusted by implementing alternative crop rotation and cropping practices, or implementing conservation practices such as contour farming, cross-slope farming, buffer strips, strip cropping, or terracing.
- r. Identify whether fields in the nutrient management plan can be used to land apply manure based on nitrogen need or phosphorus crop removal. Table 2 shall be used to make this determination for each field by considering the level of phosphorus in the soil, the soil loss number, and the presence or absence of a 100 foot vegetated buffer. Only fields identified as eligible for nitrogen based manure application can be included in the total acres needed to determine acres for manure application in the initial nutrient management plan. Fields requiring a phosphorous based plan can be listed in the plan and used for manure application. However, these acres cannot be used to show a producer has enough land to apply manure generated at the operation.

| <b>Table 2. Nitrogen Need/Phosphorus Crop Removal Manure Application Determination Table</b> |                  |  |                         |                           |                                      |                |
|--|------------------|--|-------------------------|---------------------------|--------------------------------------|----------------|
| Soil Test Phosphorus ppm   |                  | Soil Loss – Erosion, Sheet and Rill Number (Tons per Acre) |                         |                           |                                      |                |
|  |                  | Less than 4  |                         | 4 to 6                    |                                      | Greater than 6 |
|  |                  | 100 Foot Vegetated Buffer                                  |                         | 100 Foot Vegetated Buffer |                                      |                |
| Olsen  | Bray-1           | Yes  | No                      | Yes                       | No                                   |                |
| 0-25   | 0-35             | Nitrogen need  | Nitrogen need           | Nitrogen need             | Nitrogen need                        | No application |
| 26-50  | 36-75            | Nitrogen need  | Nitrogen need           | Nitrogen need             | Phosphorus crop removal <sup>1</sup> | No application |
| 51-75  | 76-110           | Nitrogen need  | Phosphorus crop removal | Phosphorus crop removal   | Phosphorus crop removal              | No application |
| 76-100   | 111-150          | Phosphorus crop removal                                    | Phosphorus crop removal | Phosphorus crop removal   | Phosphorus crop removal              | No application |
| Greater than 100   | Greater than 150 | No application   | No application          | No application            | No application                       | No application |

<sup>1</sup>Phosphorus crop removal is the amount of phosphorus a crop removes in a one year crop rotation.

- s. An estimate on the number of years it would take to raise all fields in the initial nutrient management plan to phosphorus soil test level over 50 parts per million using the Olsen test or 75 parts per million using the Bray-1 test.
  - t. Determination of the total amount of nitrogen (based on crop need) and phosphorus (based on crop removal) that can be applied to each field based on the crop planted at the field, the realistic yield goal, any residual nitrogen left in the field from past agricultural practices or crops, and the phosphorus soil test level.
  - u. Comparison of the total nitrogen requirement and crop removal of phosphorus for each field to the total nitrogen and phosphorus available in the manure. If the nitrogen in the manure exceeds the field nitrogen requirements, the producer shall identify additional fields that can be used for the application of manure.
  - v. A list indicating landowners who will be sold or given manure for its fertilizer value, the location and number of acres where manure will be applied, and the estimated amount of manure or process wastewater that will be given to each landowner. The producer must annually provide each landowner with the manure or process wastewater sample results for total nitrogen, inorganic nitrogen, and total phosphorus. Organic nitrogen is equal to the total nitrogen minus the inorganic nitrogen. Manure sold or given away may be subject to the South Dakota Department of Agriculture commercial fertilizer law, SDCL 38-19.
  - w. If any changes are made to the fields approved for use in the nutrient management plan, the producer shall submit an amendment to the department for review and approval prior to the change taking effect.
4. Annual Nutrient Management Requirements.
- a. Upon receiving permit coverage and prior to land applying manure, the producer shall use the following procedure to determine the appropriate application rates of manure and process wastewater based on a nitrogen or phosphorus plan (see Table 2). Upon determining the application rate, the producer shall apply the manure and process wastewater according to the calculated rate. Applying manure above the calculated rate is a violation of this permit. The following is the procedure for calculating the application rate:

- 1) Before manure application, each field shall be sampled to a depth of 0 to 6 inches for phosphorus and nitrate-nitrogen and to two feet for nitrate-nitrogen. The Secretary will determine on a case-by-case basis whether a land application site is located over a shallow aquifer. This will be done using the published South Dakota Geological Survey county studies, hydrologic reports, and first occurrence of aquifer materials maps, and well log information located near the fields. If manure application sites are located over shallow aquifers, the producer shall also either:
  - a) Take soil samples for nitrate-nitrogen from both 0 to 2 and 2 to 4 feet prior to manure application or
  - a) Take soil samples for nitrate-nitrogen to a depth of two feet both prior to manure application and within four weeks after harvesting the crop. This will apply to all fields in the nutrient management plan located over a shallow aquifer. Once the producer takes the post harvest soil samples, in lieu of the 2 to 4 foot samples, it will become a condition of this permit to continue taking post harvest samples for the fields located over shallow aquifers. If a producer does not take the required 2 to 4 foot samples prior to land application of manure, the post harvest sampling will then be required. In either case, the producer will no longer have the option of taking the deep soil samples.

If the post harvest soil sample results indicate the residual nitrate-nitrogen in the soil is above 100 pounds per acre, the yield goal shall be reduced by 25% the next time manure is applied to that field. If the residual post harvest nitrate-nitrogen in the soil remains above 100 pounds per acre, the department will remove that field from the approved nutrient management plan, and the producer will not be able to apply manure to this field for the life of this permit. Upon request of the producer, the department would evaluate adding back any removed field to the approved nutrient management plan when the general permit is reissued. The post harvest soil sampling information may be used to indicate permit compliance or noncompliance with the approved nutrient management plan.
- 2) A minimum of 15 soil sample cores shall be taken from each field or landscape position in the field. Soil sample cores that represent similar soil and landscape position may be composited into one sample.
- 3) The producer shall take a representative sample each year of the manure or process wastewater that will be land applied and have it tested for total nitrogen, inorganic nitrogen, and phosphorus. Organic nitrogen is equal to the total nitrogen minus the inorganic nitrogen.
- 4) Nitrogen based application. Based on a soil test, a manure test, type of crop, expected yield, legume credits, and sampling date, the producer shall determine the total nitrogen that can be applied to each field. When determining the application rate of nitrogen, the producer does not have to use the yield goals listed in the initial nutrient management plan. The producer may use the yield goal that is reasonably expected for that field. The total nitrogen that can be applied shall be determined as follows:

- a) The total nitrogen necessary to meet the expected yield goals in pounds of nitrogen per acre shall be determined using the most recent version of SDSU Extension Publication EC750, Fertilizer Recommendation Guide. This value is determined by the crop to be grown and the expected yield. In addition to the manure nitrogen allowed in the nutrient management plan, other nitrogen may be applied up to the amounts as indicated by soil nitrogen test results that are necessary to obtain the realistic yield goal.
  - b) Nitrogen credits must be subtracted from the total nitrogen value determined in item a) above. The following credits must be subtracted from this value.
    - i. The results from the two-foot nitrate soil test conducted in accordance with item a. on page 29. If a two to four-foot-deep nitrate test is required and the result of the test is greater than 30 pounds of nitrogen, then reduce the nitrogen recommendation an additional four pounds of nitrogen for each five pound increment above 30 pounds (for example, if there are 50 pounds of nitrate nitrogen in the 2-4 foot depth, 16 pounds of nitrogen in addition to the 0-2-foot-deep test must be subtracted).
    - ii. Any legume credits. For legume credits, please see the most recent SDSU Extension Publication EC 750, Fertilizer Recommendation Guide.
    - iii. Sampling date adjustment. Breakdown of organic material continues to release nitrates until soils cool in the fall. Therefore, the nitrogen requirement must be adjusted if the soil samples are taken between August 1 and September 15. To make this adjustment, reduce the nitrogen requirement by 0.5 pounds of nitrogen per day prior to September 15. The maximum adjustment would be 23 pounds (August 1 sampling). Samples taken in July should receive the same adjustments as those taken on August 1. Soil samples from fallow fields do not need to be adjusted for time of sampling because most of the residue from the previous crop should have mineralized during the fallow period.
    - iv. Any other sources of nitrogen used.
    - v. The resulting value in pounds of nitrogen per acre is the application rate of the additional nitrogen that may be applied to the field.
  - c) Based on the results of the manure testing required in item 3) on page 30, the producer shall apply manure to each field at a rate not to exceed the rate calculated in item 4)b)v. above. NOTE: If the yields that are used to calculate the application rate are not consistently attained, residual nitrogen will increase in subsequent years and will decrease the amount of manure that can be applied to that field. This nitrogen carry-over will be evident in future soil sampling.
- 5) Phosphorus based application. If the manure application is required to be based on phosphorus crop removal as determined by using Table 2 on page 29, the application rate shall be based on phosphorus removed in the harvested portion of the crop as listed in the most current version of SDSU Extension Publication EXEX 8009, Quantities of Plant Nutrients Contained in Crops. Application can be based on multi-year phosphorus crop removal but cannot exceed the one year nitrogen crop need, and no manure may be

applied to that field again until the applied phosphorus has been removed from the field via harvest and crop removal.

- b. Each producer must maintain on-site a copy of its site-specific nutrient management plan. Each producer must maintain on-site for a period of five years from the date they are created a complete copy of the nutrient management plan for their operation and the records specified below. The producer must make these records available to the Secretary upon request.
  - 1) Initial nutrient management plan;
  - 2) Expected crop yields;
  - 3) The date(s) manure, litter, or process waste water is applied to each field;
  - 4) Weather conditions at time of application and for 24 hours prior to and following application;
  - 5) Test methods used to sample and analyze manure, litter, process waste water, and soil;
  - 6) Results from manure, litter, process waste water, and soil sampling;
  - 7) Explanation of the basis for determining manure application rates, as provided in the technical standards established by this permit;
  - 8) Calculations showing the total nitrogen and phosphorus (if required) to be applied to each field, including sources other than manure, litter, or process wastewater;
  - 9) Total amount of nitrogen and phosphorus (if required) actually applied to each field, including documentation of calculations for the total amount applied;
  - 10) The method used to apply the manure, litter, or process wastewater; and
  - 11) Date(s) of manure application equipment inspection.

1.4.5. Inspection requirements. At a minimum, the following must be visually inspected:

1. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channelling contaminated storm water to the wastewater and manure storage and containment structure;
2. Daily inspection of water lines, including drinking water or cooling water lines;
3. Weekly inspections of the manure, litter, and process wastewater impoundments; the inspection will note the level in liquid impoundments as indicated by the depth marker;
4. The producer, or agent acting on behalf of the producer, shall inspect the land application equipment, land application site and irrigation equipment, if used, on a daily basis while land application of process wastewater or manure is 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 leaks are found where process wastewater or manure is reaching any surface waters of the state or flowing onto property not owned by the producer or not included in the nutrient management plan, the producer is responsible for taking immediate steps to stop the discharge or leaks and follow the reporting requirements of this permit. The



producer shall keep documentation of these inspections that the Secretary can review upon request or during an inspection; and

5. Any deficiencies found as a result of these inspections must be corrected as soon as possible.

#### 1.4.6. Record Keeping Requirements for Production Area.

1. Records documenting the inspections required.
2. Weekly records of the depth of the manure and process wastewater in the liquid impoundment as indicated by the depth marker.
3. Records documenting any actions taken to correct deficiencies required. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction.
4. Records of mortalities management and practices used by the concentrated animal feeding operation.
5. Records documenting the current design of any manure or litter storage 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.

#### 1.4.7. Annual Reporting Requirements.

1. On or before March 28, the producer must submit an annual report to the Secretary on a form provided by the Secretary to the following address:

Surface Water Quality Program  
523 East Capitol Avenue  
Pierre, SD 57501-3182

2. The annual report must include for the previous calendar year:
  - a. The number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, geese, other);
  - b. Estimated amount of total manure, litter and process wastewater generated by the producer (tons/gallons);
  - c. Estimated amount of total manure, litter and process wastewater transferred to other persons by the producer (tons/gallons);
  - d. Total number of acres for land application covered by the nutrient management plan developed in accordance with this permit;
  - e. Total number of acres under control of the producer that were used for land application of manure, litter and process wastewater;
  - f. Summary of all manure, litter and process wastewater discharges from the production area that have occurred, including date, time, and approximate volume; and

- g. A statement indicating whether the current version of the permittee's nutrient management plan was developed or approved by a certified nutrient management planner.

#### 1.4.7. Other Permit Requirements.

1. Water Rights Permit. A water right permit is required for a private water supply if the water use by the feeding operation is more than 25,920 gallons per day (18 gallons per minute) or if the combined maximum pump capacity exceeds 25 gallons per minute. For more information, contact the Water Rights Program at (605)773-3352.
2. Storm Water Construction Permit. A storm water construction permit is required if one or more acres of land will be disturbed during construction of the animal feeding operation or the manure management system. For more information on storm water permit requirements, please call 1-800-SDSTORM.

**1.5. Retention of Records.** The producer shall retain records of all monitoring information, maintenance and inspection records, copies of reports required by this permit, and data used to complete the Notice of Completion for this permit. The producer shall keep the records for at least five years from the date of the sample, measurement, report, or application. Data collected and a copy of this permit must be kept at the animal feeding operation or the usual place of business where employees of the operation have access to them.

**1.6. Twenty-four Hour Reporting.** The producer shall report any discharge as soon as possible, but no later than twenty-four (24) hours from the time the producer first became aware of the discharge. The report shall be made to the State of South Dakota at (605) 773-3351. If after normal business hours (8:00 am to 5:00 p.m. central time on Monday through Friday), the producer shall report the discharge by calling (605)773-3231. The producer shall also take immediate steps to stop the discharge and notify anyone downstream that may be impacted by the discharge.

#### **1.7. Inspection and Entry.**

1. The producer shall allow the Secretary, upon presentation of credentials, to:
  - a. Enter the premises of an animal feeding operation or where records are kept;
  - b. Inspect any animal feeding operation covered under this general permit;
  - c. Access and copy, at reasonable times, records specified under this general permit; and
  - d. Sample or monitor any substance or parameter, at reasonable times, to determine compliance with this permit or other requirements of the South Dakota Water Pollution Control Act.
2. The Secretary shall only have access to the animal confinement areas if it becomes absolutely necessary in order to determine compliance with this general permit. If access becomes necessary, the Secretary will abide by all security measures implemented by the producer to ensure protection of the health of the animals at the animal feeding operation. The Secretary will also follow all security measures the producer has implemented for all offsite visitors at open lot facilities.
3. In accordance with ARSD 74:57:01, the Secretary shall inspect concentrated animal feeding operations with at least 2,000 animal units at least annually; and all those with under 2,000 animal units at least once every three years of operation. All operations shall be inspected in the first 18 months of operation.

**1.8. Permit fee.** In accordance with SDCL 34A-2-125, there is an annual permit fee. The fee is two hundred fifty dollars for operations with two thousand or more animal units, one hundred seventy-five dollars for operations with one thousand to one thousand nine hundred ninety-nine animal units, and one hundred dollars for operations with less than one thousand animal units. The obligation to pay the fee is on the person filing the application for this permit and accrues on September 30th of each year. The department will notify the person responsible when the fee is due.

## **2.0 COMPLIANCE RESPONSIBILITIES**

**2.1. Duty to Comply.** In accordance with ARSD 74:52:03:02, owners and operators who are producers shall comply with all the conditions of the general permit; the approved plans and specifications; the Best Management Practices required by this permit to be implemented; and the Best Management Practices incorporated by the producer(s) into the operation's Operation and Maintenance Guideline and Nutrient Management Plan.

**2.2. Penalties for Violations of Permit Conditions.** The South Dakota Water Pollution Control Act provides that any producer in noncompliance with this general permit may be subject to a fine of not more than \$10,000 per day per violation.

**2.3. Need to Halt or Reduce Activity not a Defense.** In enforcing violations of this permit, the Secretary will not consider that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the permit.

**2.4. Duty to Mitigate.** Each producer shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

**2.5. Proper Operation and Maintenance.** Each producer shall at all times properly operate and maintain the manure management system in a manner to achieve compliance with the conditions of this permit.

**2.6. Removed Substances.** The producer shall dispose of the manure in accordance with the conditions of this permit to prevent any pollution of surface or ground water of the state or create a health hazard. The manure from the feeding operation shall be land applied in accordance with this permit and the initial nutrient management plan developed for the feeding operation.

## **3.0 GENERAL REQUIREMENTS**

**3.1. Planned Changes.** The producer shall give notice to the Secretary as soon as possible of any planned physical alterations or additions that significantly change the permitted animal feeding operation. During and after implementation of those changes, the producer is bound to the terms and conditions of this general permit.

**3.2. Permit Actions.** The Secretary may modify, revoke and reissue, or terminate this permit in accordance with ARSD Chapter 74:52:04:03. If the Secretary decides to modify or revoke and reissue the permit, the terms and conditions of this general permit will remain in effect until a new or modified permit becomes effective.

**3.3. Duty to Reapply.** Before the expiration of this permit, the Secretary will provide each producer authorized to operate under this permit with a renewal application. The producer will be responsible for returning the Notice of Intent to Retain Coverage Form to the Secretary to receive coverage under

the new permit at least 60 days before the expiration of the existing permit. Producers need not continue to seek permit coverage or reapply for a permit if:

1. They have notified the Secretary that their operation has ceased operation or is no longer a concentrated animal feeding operation; and
2. The Secretary has notified the producer that the operation is no longer a concentrated animal feeding operation.

**3.4. Continuation of the Expired General Permit.** An expired general permit continues in force and effect until the Secretary issues a new general permit so long as the producer remains in compliance with the conditions of this permit, the approved plans and specifications, the Best Management Practices required by this permit to be implemented, and the Best Management Practices incorporated by the producer(s) into the Operation and Maintenance Guideline and the Nutrient Management Plan.

**3.5. Duty to Provide Information.** The producer shall provide any information that the Secretary requests in order to determine whether cause exists for revoking or terminating coverage under this permit. The Secretary may also request information to determine if the producer is in compliance with this permit. The producer shall provide to the Secretary, upon request, copies of records that the permit requires the producer to keep.

**3.6. Other Information.** If the producer becomes aware that any relevant facts in the Notice of Completion and Certification of Applicant Forms were not submitted, or incorrect information was submitted, the correct information shall be promptly submitted to the Secretary.

**3.7. Signatory Requirements.** The producer shall sign and certify all reports submitted to the Secretary.

1. The owner of the feeding operation shall sign all permit applications or forms to receive coverage under this permit.
2. The owner, or his duly authorized representative, may sign all reports required by the permit and other information requested by the Secretary. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by the owner and submitted to the Secretary; and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the animal feeding operation. This position may be a manager, operator, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
3. Changes to authorization. If an authorization under Section 3.7.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section 3.7.2. must be submitted to the Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

“I also certify under penalty of law that this document and all other plans and application documents to obtain coverage under the animal feeding general permit were prepared under my direction or supervision in accordance with a system designed to assure that qualified

personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for submitting false information.”

- 3.8. Penalties for Falsification of Reports.** Any person who knowingly makes a false statement in any record submitted or required to be maintained under this permit, shall be subject to enforcement under the South Dakota Water Pollution Control Act.
- 3.9. Availability of Reports.** Except for data determined to be confidential under ARSD 74:52:02:17, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Secretary. The Secretary will not consider applications, operation and maintenance guidelines, nutrient management plans, notices of completion, permits, plans and specifications, and monitoring data, or any correspondence related to these items, to be confidential information.
- 3.10. Property Rights.** Any authorization to operate under the general permit does not convey any property rights or any exclusive privilege.
- 3.11. Severability.** Any portion of the general permit that is found to be void, or is challenged, shall not affect the validity of the other permit requirements that are not void or challenged.
- 3.12. Transfers.** The Secretary will transfer a permit application approval or coverage under this permit to a new owner if:
1. The current owner notifies the Secretary at least 30 days in advance of the proposed transfer date;
  2. The notice includes a written agreement between the existing and new owners containing a specific date for transfer of permit responsibility, coverage, and liability between them;
  3. The new owner submits a Certification of Applicant form;
  4. The new owner submits a signed operation and maintenance guideline;
  5. The new owner submits documentation that the current nutrient management plan will continue to be used or a revised nutrient management plan for approval; and
  6. The new owner(s) submit documentation that they have attended an approved training session or they will attend one of the next available approved training sessions and provide documentation to the Secretary.

If the operation of the facility will essentially remain unchanged and the Secretary takes no action, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 of this section. If the new owner proposes to change the animal feeding operation, the permit must be transferred as set forth in Administrative Rules of South Dakota, Chapter 74:52:04:01. See the Change of Ownership Form in Appendix I.

- 3.13. Reopener Provision.** If state or federal statutes or regulations change, the Secretary may reopen and modify this permit (following proper administrative procedures) to include appropriate conditions (and a compliance schedule, if necessary), to address the additional requirements.

**3.14. Appeals Provision.** If the Secretary recommends to revoke, suspend, or modify a permit, the Secretary shall give written notice of the action to the permit holder. The permit holder may request a hearing before the Secretary. The hearing shall be held within thirty days of receipt of the written request. The Secretary may affirm, modify, or reverse the initial decision based upon the evidence presented at the hearing.

**3.15. Requiring an Individual Permit.** The Secretary may deny coverage or require any producer requesting coverage under the general permit to apply for an individual permit. The Secretary's decision to deny coverage under this permit and require an individual permit will be based on the following:

1. Ability of the producer to comply with the state's environmental requirements for animal feeding operations;
2. Past compliance history of the producer based on disclosures made under the Certification of Applicant Form;
3. Proposed location of the animal feeding operation such as its proximity to a drinking water source or whether it is proposed to be located in a priority watershed; and
4. Treatment or disposal technology proposed to be used at the animal feeding operation is beyond the scope of the conditions presented in this permit.

The Secretary will notify the producer in writing if an individual permit is required. When the Secretary issues an individual permit to a producer, the producer is responsible for complying with the terms and conditions of the new individual permit and relieved from responsibility of complying with this general permit.

# **APPENDIX A**

## **NOTICE OF COMPLETION and CERTIFICATION OF APPLICANT FORMS**











*Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."*

Pursuant to SDCL 1-40-27, I certify that I have read the forgoing provision of state law, and that I am not unsuited or unqualified to perform the obligations of a permit holder as specified in SDCL 1-40-27(1)(a) through (e), and that this application does not substantially duplicate, without correction of deficiencies, any application denied within the last five years.

I certify under penalty of law that this document and all other plans and application documents to obtain coverage under the animal feeding general permit were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for submitting false information."

I also grant permission to the Secretary for performing inspections. The scope of these inspections shall be limited to that reasonably necessary to ensure that pollution of waters of the state and other natural resources is not occurring, that reports filed with the secretary are accurate, and that the operation is being conducted pursuant to the general permit requirements, approvals, or orders required by SDCL 34A-2 or ARSD 74:03:14:01.

Dated this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Applicant Signature

Subscribed and sworn before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

**(SEAL)**

**PLEASE ATTACH SHEET DISCLOSING ALL FACTS PERTAINING TO  
SDCL 1-40-27 (1)(a) THROUGH (e).  
ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT  
AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION.**

# **APPENDIX B**

## **NOTICE OF INTENT FORM**





DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

NOTICE OF INTENT FOR COVERAGE  
UNDER THE GENERAL WATER POLLUTION CONTROL PERMIT  
FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

This form is required to be submitted by applicants for permit coverage. Please submit this form to the following address:

South Dakota Department of Environment and Natural Resources  
Surface Water Quality Program  
Joe Foss Building  
523 East Capitol Avenue  
Pierre, South Dakota 57501-3182  
Telephone: (605) 773-3351 FAX: (605) 773-5286

**PLEASE PRINT OR TYPE**

1. Existing permit number (if applicable): \_\_\_\_\_
2. Name of Animal Feeding Operation / Name of Owner or Operator: \_\_\_\_\_
3. Location of Facility (legal description): \_\_\_\_\_

**Mailing Address of Producer:**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Fax: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Mailing address of the animal feeding operation (if different from producer):**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Fax: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**4. Latitude and Longitude of the entrance to the production area:**

Latitude: \_\_\_\_\_ degrees OR \_\_\_\_\_ degrees \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
Longitude: \_\_\_\_\_ degrees OR \_\_\_\_\_ degrees \_\_\_\_\_ minutes \_\_\_\_\_ seconds

**5. Submit a topographic map of the area in which the animal feeding operation is located showing the specific location of the production area(s). Attach map to back of form.**

**6. Number of animals and housing information:**

**a. Open lots**

Swine weighing less than 55 pounds: \_\_\_\_\_ Swine weighing 55 pounds or more: \_\_\_\_\_  
Beef cattle: \_\_\_\_\_ Mature dairy cows: \_\_\_\_\_ Dairy heifers: \_\_\_\_\_ Veal calves: \_\_\_\_\_  
Sheep and lambs: \_\_\_\_\_ Horses: \_\_\_\_\_ Ducks: \_\_\_\_\_ Turkeys: \_\_\_\_\_  
Chickens: Broilers: \_\_\_\_\_ Layers: \_\_\_\_\_ Geese: \_\_\_\_\_  
Other (Explain): \_\_\_\_\_

**b. Housed lots**

Swine weighing less than 55 pounds: \_\_\_\_\_ Swine weighing 55 pounds or more: \_\_\_\_\_  
Beef cattle: \_\_\_\_\_ Mature dairy cows: \_\_\_\_\_ Dairy heifers: \_\_\_\_\_ Veal calves: \_\_\_\_\_  
Sheep and lambs: \_\_\_\_\_ Horses: \_\_\_\_\_ Ducks: \_\_\_\_\_ Turkeys: \_\_\_\_\_  
Chickens: Broilers: \_\_\_\_\_ Layers: \_\_\_\_\_ Geese: \_\_\_\_\_  
Other (Explain): \_\_\_\_\_

**7. Type of Manure Containment and Storage Capacity:**

Manure Containment (*check all that apply*):     Anaerobic Lagoon(s)     Roofed Storage Shed(s)     Storage Pond(s)  
 Above-ground storage tank(s)     Under-floor Pit(s)     Below-ground storage tank(s)  
 Approved Stockpiling Area(s)     Other (*Explain*):

Total Capacity for manure, litter, and process wastewater storage (*in tons and/or gallons*):

\_\_\_\_\_ tons    \_\_\_\_\_ gallons

**8. Total number of acres available for land application of manure, litter, or process wastewater (*owned and/or covered by signed manure application agreements*):** \_\_\_\_\_ acres

**9. Estimated amounts of manure, litter, and process wastewater generated per year (*in tons and/or gallons*):**

Depending on the animal feeding operation's manure management system, use one or more of the following blanks:

Liquid: \_\_\_\_\_ gallons    Solid: \_\_\_\_\_ tons

**10. Estimated amounts of manure, litter, and process wastewater transferred to other persons per year (*in tons and/or gallons*):**

Depending on the animal feeding operation's manure management system, use one or more of the following blanks:

Liquid: \_\_\_\_\_ gallons    Solid: \_\_\_\_\_ tons

**By signing this form I understand that I will need to continue to operate my system in accordance with my general permit application, DENR approval, and the requirements of the general permit. If anything in my original application is no longer accurate, I will contact the department at (605) 773-3351 and work with the department to amend my application within 60 days from the date the department mails this form.**

**I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowing violations. In addition, I certify that I am aware of the terms and conditions of the General Permit for Concentrated Animal Feeding Operations and I agree to comply with those requirements.**

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**NOTE:** Notice of Intent must be signed by the authorized chief executive officer of the applicant, or by the applicant, if an individual.

\_\_\_\_\_  
Name (*print*)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Additional information or comments you wish to provide:**



## **APPENDIX C**

### **NOTICE OF TERMINATION OF COVERAGE FORM**





DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

NOTICE OF TERMINATION OF COVERAGE
UNDER THE GENERAL WATER POLLUTION CONTROL PERMIT
FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

This form is required to be submitted when a discharge permit is no longer required or necessary. Submission of this form shall in no way relieve the producer of permit obligations required prior to submission of this form. Please submit this form to the following addresses:

original to: South Dakota Department of Environment and Natural Resources
Surface Water Quality Program
Joe Foss Building
523 East Capitol Avenue
Pierre, South Dakota 57501-3182
Telephone: (605) 773-3351 FAX: (605) 773-5286

PLEASE PRINT OR TYPE

1. Name of Animal feeding operation: \_\_\_\_\_

2. Mailing Address of Producer:

Name \_\_\_\_\_ Phone: ( ) \_\_\_\_\_

Street \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ County \_\_\_\_\_ Zip Code \_\_\_\_\_

3. Mailing address of the animal feeding operation (if different from producer):

Name \_\_\_\_\_ Phone: ( ) \_\_\_\_\_

Street \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ County \_\_\_\_\_ Zip Code \_\_\_\_\_

4. Check the reason for termination of permit coverage:

- checkbox You are no longer the operator of the facility
checkbox Concentrated Animal feeding operation is no longer in operation
checkbox Other reason(s): \_\_\_\_\_

I certify under penalty of law that all concentrated animal feeding operations at the above facility that are authorized by a Surface Water Discharge general permit have been eliminated or that I am no longer the operator of the facility. I understand that by submitting the Notice of Termination, I am no longer covered under the general permit for concentrated animal feeding operation under this general permit. I also understand that the submittal of this Notice of Termination does not release me from liability for any violations of this permit or the South Dakota Water Pollution Control Act. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NOTE: Notice of Termination must be signed by the authorized chief executive officer of the applicant, or by the applicant, if an individual.

Name (print) \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Permit Number: \_\_\_\_\_ Date Received: \_\_\_\_\_
Date Terminated: \_\_\_\_\_ PCS: \_\_\_\_\_

# **APPENDIX D**

## **NUTRIENT MANAGEMENT PLAN**



**INSERT THE SITE SPECIFIC NUTRIENT MANAGEMENT PLAN HERE**



# **APPENDIX E**

25-YEAR, 24-HOUR AND

100- YEAR, 24-HOUR

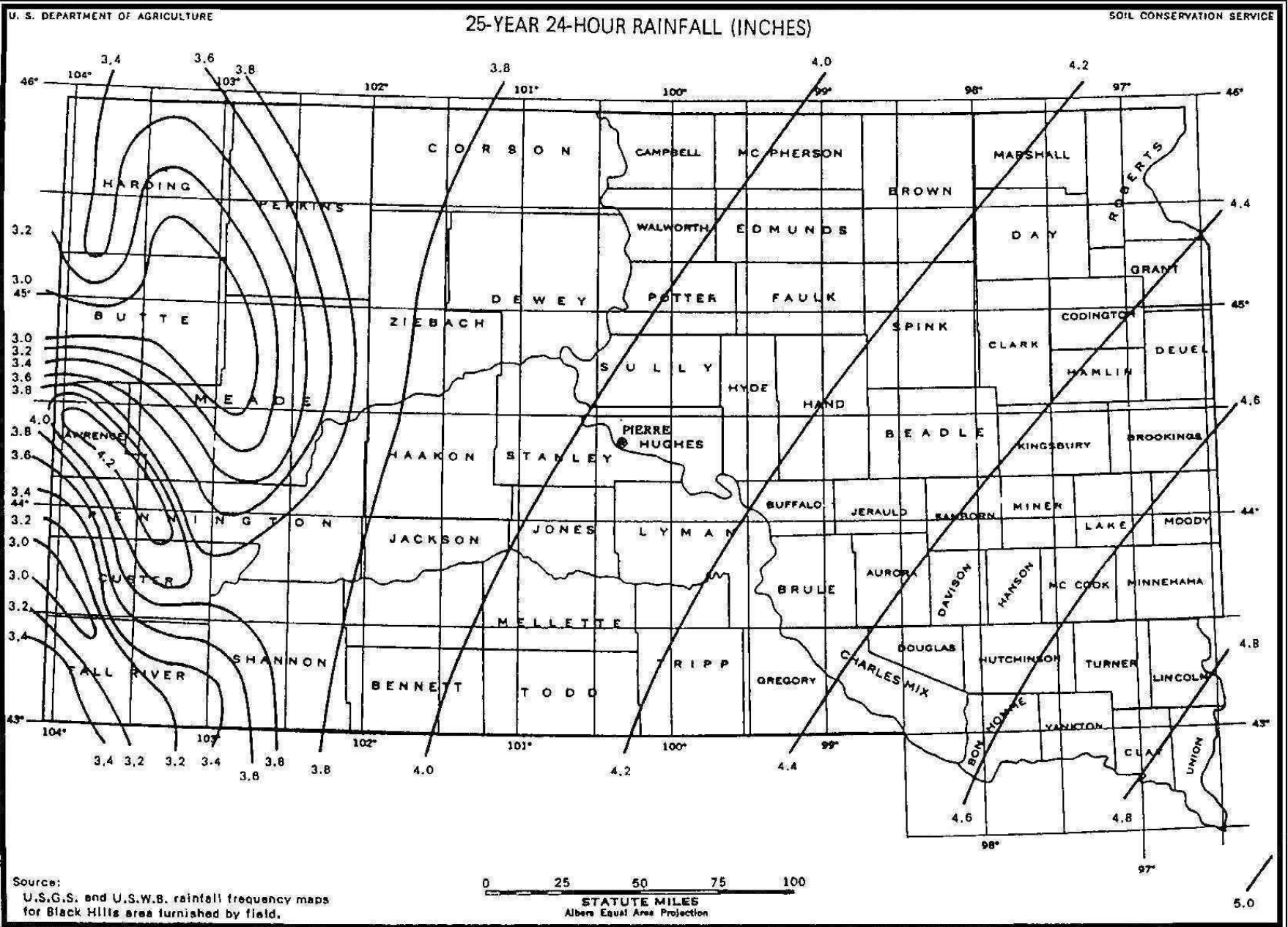
RAINFALL MAPS

FOR SOUTH DAKOTA





# SOUTH DAKOTA



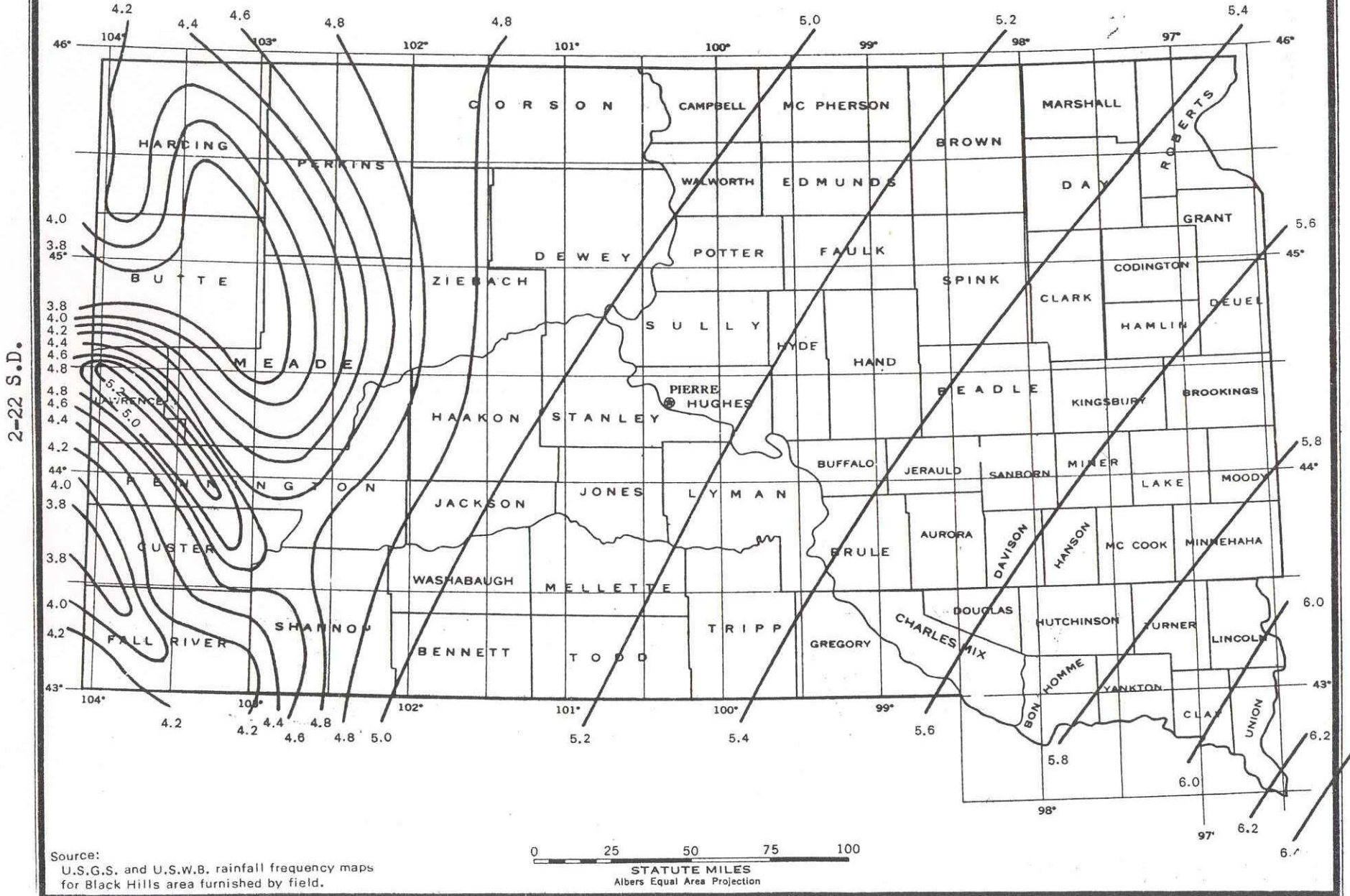
2-20 S.D.

# SOUTH DAKOTA

U. S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

## 100-YEAR 24-HOUR RAINFALL (INCHES)



2-22 S.D.

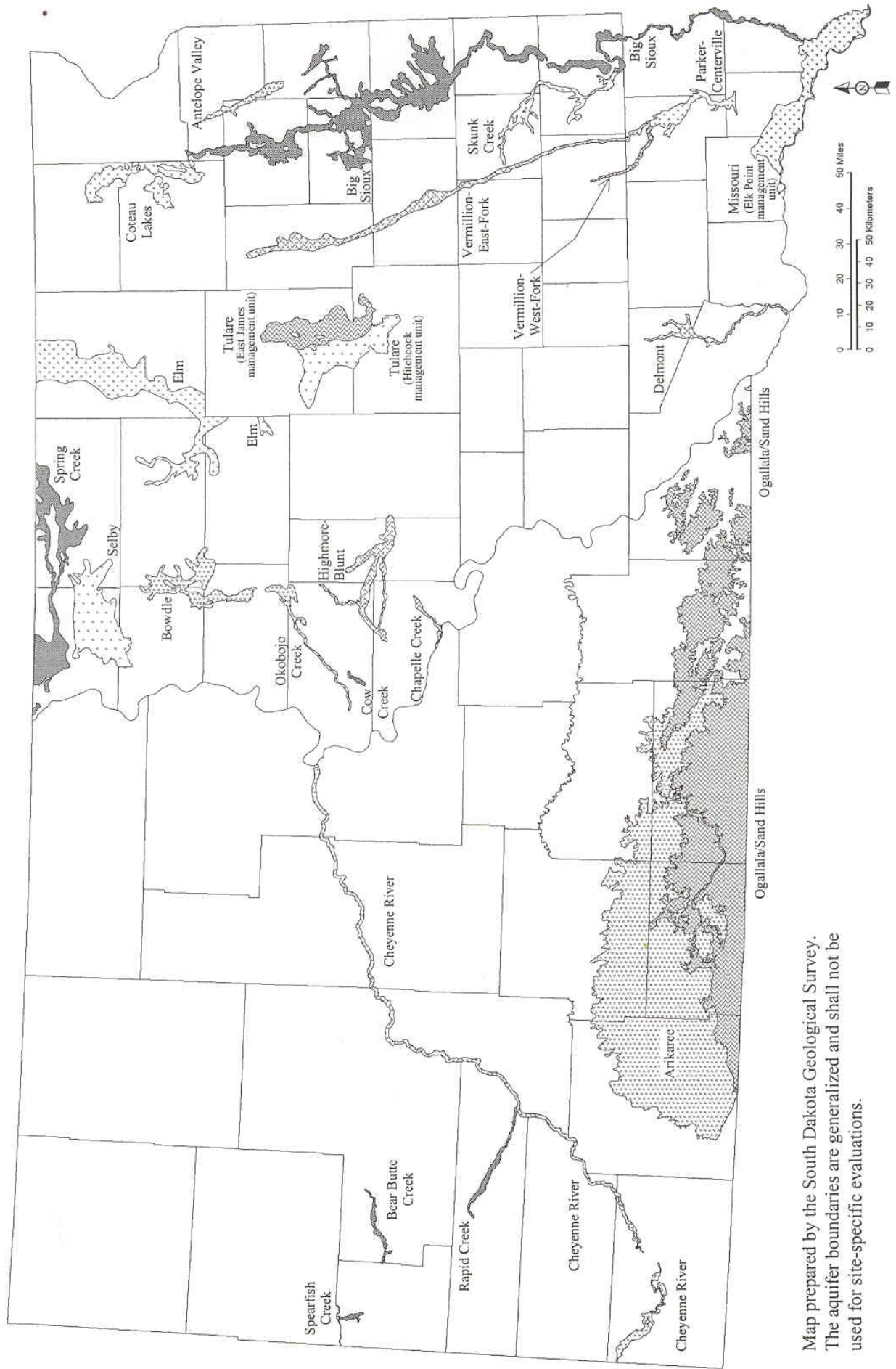
5, L-27,732-6(6)

# **APPENDIX F**

## **MAPPED AQUIFERS INCLUDED IN THE STATEWIDE GROUND WATER QUALITY MONITORING NETWORK**



# Appendix F: Mapped aquifers included in the statewide ground water quality monitoring network



Map prepared by the South Dakota Geological Survey. The aquifer boundaries are generalized and shall not be used for site-specific evaluations.



# **APPENDIX G**

## **DENR CRITERIA TO DETERMINE GROUND WATER DISCHARGE AND MONITORING REQUIREMENTS FOR LIVESTOCK FEEDING OPERATIONS**





## APPENDIX G

| <b>DENR Criteria to Determine Ground Water Discharge and Monitoring Requirements for Concentrated Animal Feeding Operations</b>   |   |  |  |   |  |
|---|---|--|--|---|--|
| Located over a Shallow Aquifer*   |   |  |  | Not Located over a Shallow Aquifer  |  |
| Counties without Zoning and Wellhead Protection Ordinances  |   |  | Counties with Zoning and Wellhead Protection Ordinances  |   |  |
| Large CAFOs   |   | Medium and Small CAFOs Units   | Any Size Operation   | Any Size Operation  |  |
| <p>New Feeding Operation (After July 1, 1997):</p> <ul style="list-style-type: none"> <li>• Ground Water Discharge Permit and</li> <li>• Ground water monitoring required.</li> </ul> | <p>Existing or Expanding Feeding Operation:</p> <ul style="list-style-type: none"> <li>• Ground water monitoring required.</li> </ul> | <ul style="list-style-type: none"> <li>• If the county requires state approval or a valid water pollution complaint is filed on the livestock feeding operation; or the producer requests coverage under a state general permit, DENR will use the criteria described in the general permit for concentrated animal feeding operations to determine if a ground water discharge permit and/or ground water monitoring is required.</li> <li>• If a producer is not required by either local or state law to obtain coverage under a state general permit, but requests plans and specifications approval, ground water monitoring will be required.</li> <li>• Producer has the option of applying for a ground water discharge permit.</li> </ul> | <ul style="list-style-type: none"> <li>• Operation must comply with local government ordinances.</li> <li>• If a valid water pollution complaint is filed, or if the producer requests coverage under a state general permit, ground water monitoring will be required.</li> <li>• If a producer is not required by local or state law to obtain coverage under a state general permit, but requests plans and specifications approval, ground water monitoring will be required.</li> <li>• If the operation is outside a wellhead protection area, the producer has the option of applying for a ground water discharge permit.</li> </ul> | <ul style="list-style-type: none"> <li>• Ground Water Discharge Permit not required.</li> <li>• Monitoring may be required if site-specific conditions warrant monitoring to protect localized, shallow ground water supplies.</li> </ul> |  |

All feeding operations must be in compliance with South Dakota Ground Water Quality Standards. A Ground Water Discharge Permit allows the producer to have a limited zone where ground water may be impaired.

\*Shallow aquifer is defined in SDCL 34A-3A-24 passed by the 1997 Legislature.

# **APPENDIX H**

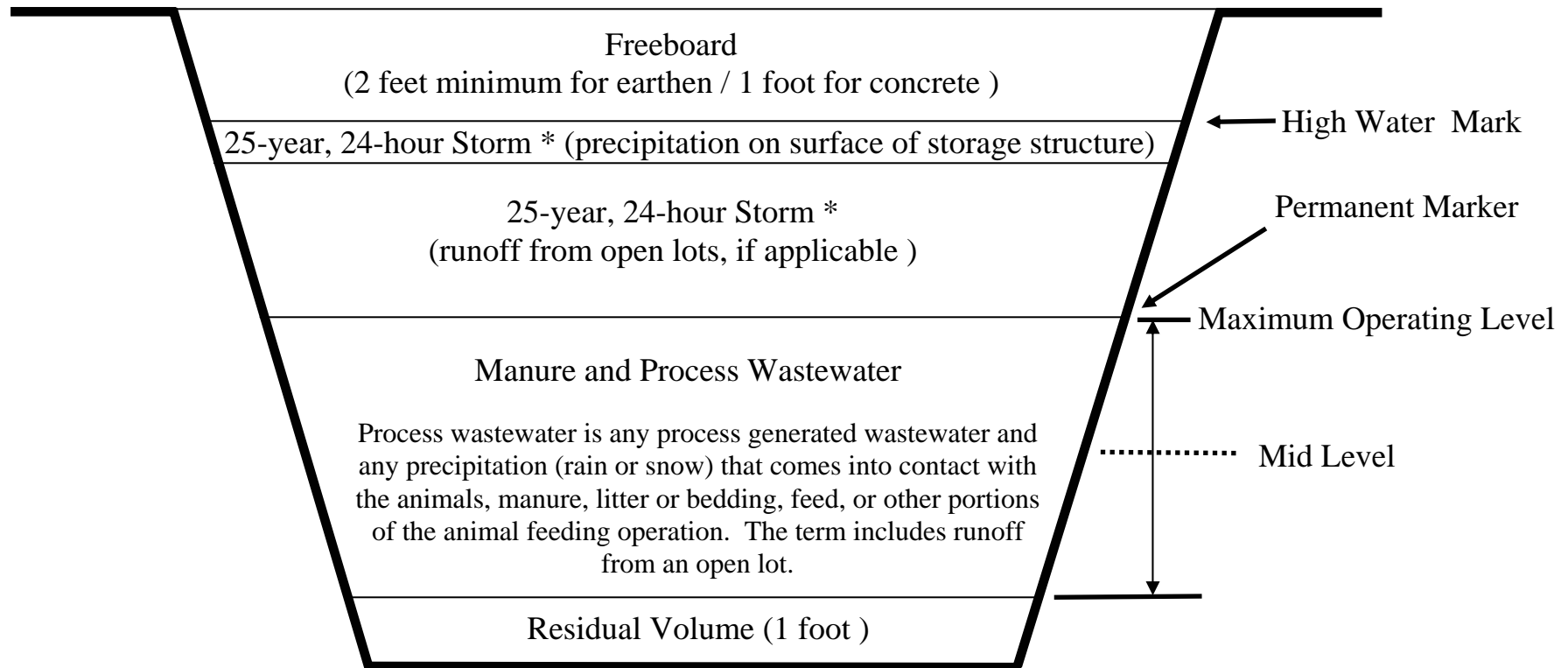
**CROSS SECTION OF MANURE**

**STORAGE STRUCTURE**



## APPENDIX H

### CROSS SECTION OF MANURE STORAGE STRUCTURE





# **APPENDIX I**

## **CHANGE OF OWNERSHIP FORM**





DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

CHANGE OF OWNERSHIP FORM  
FOR THE GENERAL WATER POLLUTION CONTROL PERMIT  
FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

In accordance with the Administrative Rules of South Dakota, Chapter 74:52:04, a permit may be transferred to a new owner if the current permittee notifies the secretary at least 30 days in advance of the proposed transfer date. This form and a Certification of Applicant form must be completed and submitted prior to a change in ownership at a concentrated animal feeding operation. This form shall serve as a request by the current and new owner to modify the permit solely for a change in ownership.

Note: If the new owner plans to make changes to the permitted manure management system or nutrient management plan, additional information showing that the changes will meet the requirements of the general permit must be submitted with this form. If applicable, any written agreement between the permittee and the land owner where manure will be applied shall be written so it is transferable or new agreements shall be submitted.

Please submit this form to the following address: South Dakota Department of Environment and Natural Resources  
Surface Water Quality Program  
Joe Foss Building  
523 East Capitol Avenue  
Pierre, South Dakota 57501-3182  
Telephone: (605) 773-3351 FAX: (605) 773-5286

PLEASE PRINT OR TYPE

1. **Facility Information:** Permit Number \_\_\_\_\_ Location of Operation: \_\_\_\_\_ / \_\_\_\_\_  
1/4 Section Section Township / Range County

2. **Owner Information Prior to Change:**

Legal name of facility prior to change \_\_\_\_\_

Name of Owner Prior to Change \_\_\_\_\_ Phone: \_\_\_\_\_

Street \_\_\_\_\_ Fax: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

3. **New Owner Information:**

Legal name of facility after ownership change \_\_\_\_\_

Name of New Owner \_\_\_\_\_ Phone: \_\_\_\_\_

Street \_\_\_\_\_ Fax: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

4. **Proposed Transfer Date of Permit Responsibility:** Date: \_\_\_\_\_

5. **Description of Facility Modifications:**

The new owner must complete this section and check only one of the following boxes:

Modifications consist only of a change in ownership of the facility. No other modifications affecting the manure management system are proposed for this facility.

Modifications consist of a change in ownership of the facility and the additional modifications are described in detail below. Contact DENR for information required to be submitted. Attach additional pages if necessary.

6. **Producer Training:**

Permittees are required to attend a DENR approved training class.

I have attended training. Please submit your training certificate.

I will attend the next DENR approved training session.

7. **Operation and Maintenance Guideline:**

A new Operation and Maintenance Guideline signed by the new permit applicant is attached.

8. **New Owner Certification:**

I hereby certify that I am the new owner of the facility described above and that I have read and understand the requirements identified in this form. I hereby certify that the construction and/or operation of the facility referenced above will be in accordance with the plans, specifications, reports, permit application submittals approved by DENR. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Current Permittee (print): \_\_\_\_\_ Signature of Current Permittee: \_\_\_\_\_ Date: \_\_\_\_\_

Name of New Permittee (print): \_\_\_\_\_ Signature of New Permittee: \_\_\_\_\_ Date: \_\_\_\_\_