

WATER PERMIT NO. 6041-3

Name of Applicant: **Thompson Farms Ltd.**

Address: **39313 240th St, Letcher SD 57359**

Phone: **605 248-2582**

Amount of Water Claimed: **0.333 cfs (150 gpm)**

Total Acres: **NA**

Source of Water Supply: **groundwater**

Water to be used for: **commercial use - livestock confinement facility** County: **Aurora**

Type of Waste Disposal System:

Location: **15 miles northeast of Plankinton**

PRIORITY

Date Received: **1-20²-1998**

Fee:

Corrected Application Received:

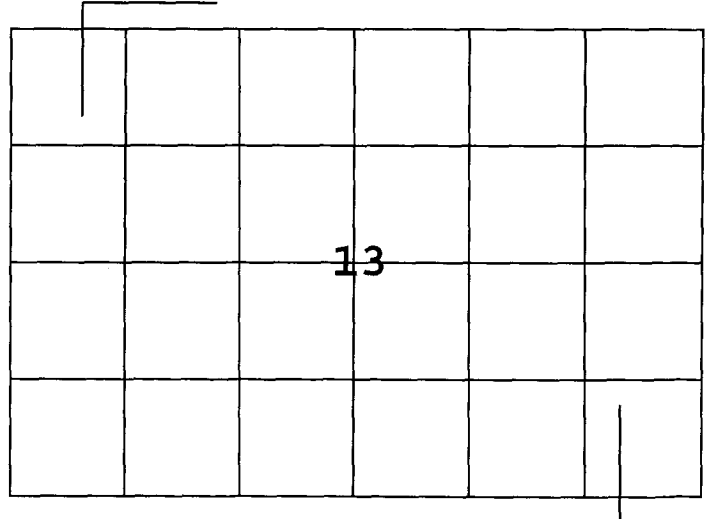
Period of Annual Use: **January 1 - December 31**

Remarks:

Diversion Point: **SW 1/4 NW 1/4**

Sec 13-T105N-R63W

Land to be Irrigated:



Depth of Well: **200 feet deep**

Well Driller: **Pullman Well Drilling**

Remarks:

Type of Map:

Prepared by:

Reviewed and the Number Assigned on: **1-21-1998**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 6041-3**

Date of first receipt of application January 22, 1998.

The Water Management Board approved Water Permit Application No. 6041-3 on February 25, 1998 for Thompson Farms Ltd., 39313 240th St, Letcher SD 57359 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 6041-3 appropriates 0.333 cubic feet of water per second (150 gallons per minute) from three wells (Codell Aquifer) 200 feet deep located in the SW 1/4 NW 1/4 Section 13-T105N-R63W.
2. The water appropriated shall be used for the purpose of supplying water to a cow dairy facility and may not exceed the amount of water needed for beneficial use for commercial use purposes.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date from which applicant may claim right is January 22, 1998.
5. One-fifth of the construction is to be completed on or before August 25, 2000.
6. All construction is to be completed on or before February 25, 2003.
7. Water is to be put to beneficial use on or before February 25, 2007.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Permit No. 6041-3 is subject to compliance with requirements of the General Water Pollution Control Permit for animal feeding operations.
2. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The wells authorized by Permit No. 6041-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

(continued)

4. Permit No. 6041-3 is subject to compliance with the existing and applicable Water Management Rules:

- a) Chapter 74:54:01 Ground Water Quality Standards,
- b) Chapter 74:54:02 Ground Water Discharge Permit,
- c) Chapter 74:51:01 Surface Water Quality Standards,
- d) Chapter 74:51:02 Uses Assigned to Lakes,
- e) Chapter 74:51:03 Uses Assigned to Streams, and
- f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

WATER MANAGEMENT BOARD

By: _____

John Hatch, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

MAR 24 1998

date



FORM 2: Application for uses other than irrigation
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6041-3</u> (office use only) Hydrologic Unit <u>10/60011</u>
	Basin <u>James River</u>
	Newspaper <u>S.D. Mail, Plankinton, SD</u>



Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☒ Domestic (over 18 gpm)	☐ Industrial	☐ Other	

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____

- Name of Applicant Thompson Farms Ltd. Phone 605-248-2582
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 39313 240th St Letcher State SD 57359
(Street, RR. or Box) (Zip Code)
- Amount of water claimed 0.333 *CFS or 150 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Wells
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 3 wells in SW1/4 of NW1/4 Section 13-T105N-R63W
County Aurora
- County or counties where water will be used Aurora
- Annual period during which water is to be used All year long Jan 1 - Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
These wells will be used to water cows at our dairy.

STATE OF SOUTH DAKOTA)

County of Aurora SS

I, Thompson Farms
By Paul Thompson, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

Signed Paul Thompson Pres.

Subscribed and sworn to before me this 18 day of January 19 98

Keith Thompson

Notary Public

My Commission Expires 10/1/2001

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

As Per Well Completion Report.

- a) Drill Hole Diameter 8 1/2 Depth 200
- b) Casing Type PVC Diameter 5" Thickness 1/4"
- c) Screen Type Manufactured Diameter 5" Thickness
- d) Gravel Pack Length of Gravel Pack
- e) Depth to Top of Water Bearing Material
- f) Depth to Water (ground surface to water level)
- g) Distance to nearest existing domestic well:

On applicants property On property owned by others

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field)
- b) System Capacity (gallons) Year Constructed
- c) Connected to the City of Sanitary System

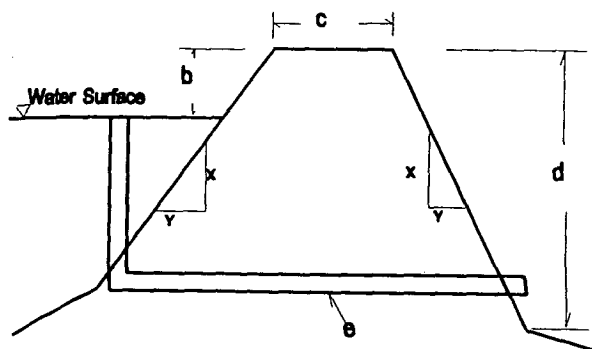
3. Dugout Information

- a) Surface Dimensions Depth
- b) Depth to water (ground surface to water level)

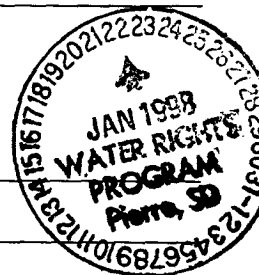
4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard
- c) Crest Width
Crest Length
- d) Height
- e) Primary Outlet Capacity
If pipe, diameter
- f) Secondary Spillway Capacity
Spillway Width
- g) X & Y Slope
Upstream
Downstream
- h) Surface Area of Impoundment
- i) Storage Acre Feet
- j) Drainage Area Above Dam Acres



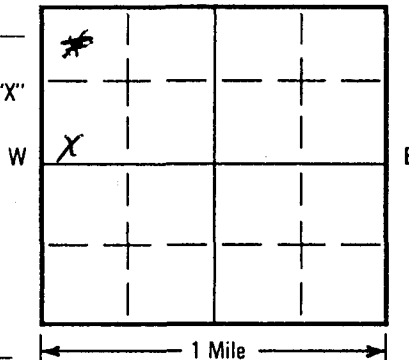
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 NW 1/4 Sec 13 Twp 145 Rg 63
County Aurora

North

Please mark well location with an "X"



Well Completion Date

1/15/98

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 200 ft. from Barn (identify source).

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

RotaryCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
_____ LB/FT	<u>5</u> IN	<u>0</u> FT	<u>167</u> FT	<u>8 1/2</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	<u>5</u>	_____ lb./gal	<u>0</u> ft	<u>20</u> ft
<u>Gravel</u>	<u>8</u>	_____ lb./gal	<u>20</u> ft	<u>150</u> ft

Describe grouting procedure line to 150 ft.

SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 5 IN Length 3.3 FEETMaterial P.V.C.Slot Size 0.16 Set From 167 Feet to 200 Feet

Other information

Gravel packedWAS A PACKER OR SEAL USED? ☐ YES ☐ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

X YES, How:Bellets

NO, Why Not? _____

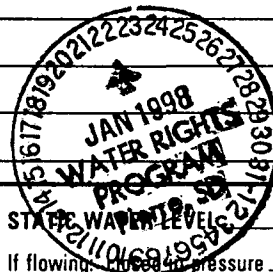
Laboratory sent to for water quality analysis

Well Owner: Thompson Farms Ltd.
Business Name: _____
Address: RT 1 Box 26A
Leitch SD

WELL LOG:

DEPTH

FORMATION	FROM	TO
<u>yellow clay</u>	<u>0</u>	<u>40</u>
<u>Blue clay</u>	<u>40</u>	<u>150</u>
<u>Chalk</u>	<u>150</u>	<u>170</u>
<u>Ordell</u>	<u>170</u>	<u>200</u>

STATE WATER LEVEL 30 Feet

If flowing, pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe: 60 GPM.
☐ Bailed Air compressor
☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

2 Drains HardThis well was drilled under license # 440

And this report is true and accurate.

Drilling firm Pullman Well Drilling

Signature of License Representative:

KE Kuehl

Signature of Well Owner or Equitable Property Holder:

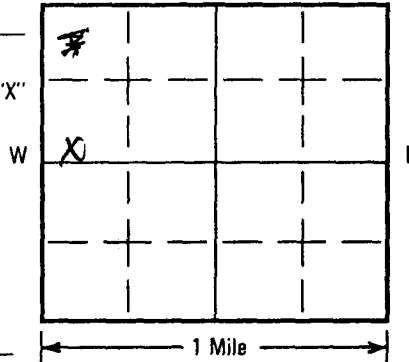
Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location ~~SW~~ ^{SW} 1/4 NW 1/4 Sec 13 Twp 105 Rg 63
County Aurora

Please mark well location with an "X"



Well Completion Date

1/15/98

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 200 ft. from Barn (identify source).

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary

CASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	5 IN	0 FT	167 FT	8 1/2 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
Cement	5	lb./gal	0 ft	20 ft
Gravel	8	lb./gal	20 ft	150 ft

Describe grouting procedure: line to 150 ft.

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 5 IN Length 3.3 FEET

Material P.V.C.

Slot Size 0.16 Set From 167 Feet to 200 Feet

Other information: Gravel packed

WAS A PACKER OR SEAL USED? ☐ YES ☐ NO

If so, what material?

Describe packer(s) and location?

DISINFECTION: Was well disinfected upon completion?

X YES, How:

Bellets

NO, Why Not?

Laboratory sent to for water quality analysis

Well Owner: Thompson Farm Ltd

Business Name:

Address: RT 1 Box 26A

Leitch SD

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
yellow clay	0	40
Blue clay	40	150
Chalk	150	170
Gravel	170	200

STATIC WATER LEVEL 30 Feet

If flowing: closed in pressure PSI

GPM flow through inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced Flowrate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: 60 GPM.

☐ Bailed Air compressor

☐ Other

Pumping Level Below Land Surface

ft. After Hrs. pumped GPM

ft. After Hrs. pumped GPM

If pump installed, pump rate GPM

REMARKS

2 Drains Hard

This well was drilled under license # 440

And this report is true and accurate.

Drilling firm Pullman Well Drilling

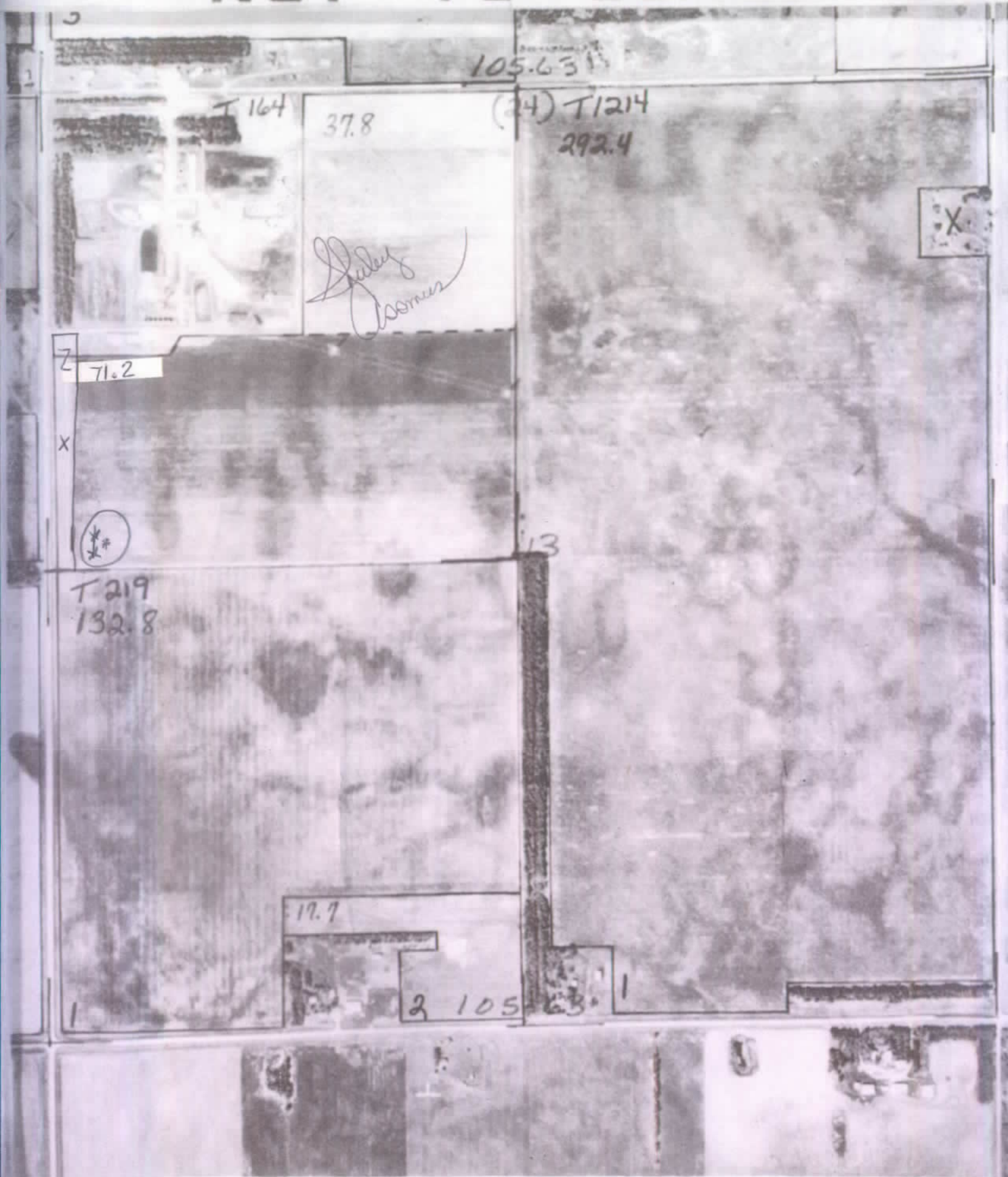
Signature of License Representative:

KE Kuehl

Signature of Well Owner or Equitable Property Holder:

Date:

NOT TO SCALE



6041-3

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

415614

Pierre, January 22, 1998

RECEIVED OF Thompson Farms Ltd., 39313 240th St., Letcher, SD 57359-9602
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>6044-P</u> to Appropriate Water, to construct and to put water to beneficial use _____	225	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	225 00

By _____
Chief Engineer

John Hatch (9)

REPORT ON WATER PERMIT APPLICATION NO. 6041-3
for Thompson Farms Ltd.
January 26, 1998

Application No. 6041-3 propose to appropriate 0.333 cfs (150 gpm) from three wells approximately 200 feet deep located in the SW 1/4 NW 1/4 of Section 13, T105N-R63W in Aurora County. The water is for commercial use in a dairy cow facility.

AQUIFER - CODELL (CDLL)

The Codell is a buried bedrock aquifer which is under confined or artesian conditions at this site. The aquifer consists of gray, brown, reddish brown, green, or black cemented, fine to medium sandstone, siltstone, and much soft, fine to medium sand and silty shale (Hamilton, 1985). Ground water movement is from southwest to northeast across northern Aurora County. The aquifer is large and is hydraulically connected into Jerauld County to the north, Sanborn County to the east, Davison County to the southeast and Douglas County to the south. The aquifer underlies 900 square miles and contains an estimated 6 million acre feet of water in storage in Jerauld and Aurora Counties (Hamilton, 1985). The Codell is overlain by the Niobrara Formation which is also an important aquifer in this area. Even though geologically these two aquifers directly overlie one another, hydrologically there appears to a distinction both in terms of water quality and water level elevations. Even so, in all probability, there is some hydraulic communication between the aquifers at least over part of the area.

A well completion report filed with the application indicates the top of the Codell was encountered at a depth of 170 feet and extended to a depth of 200 feet. The well as completed had a static water level of 30 feet below land surface and was capable of producing 60 gpm using air for development.

The Water Rights Program monitors two observation wells, AU-78G and SA-77A, completed into the Codell and located about 4 miles southwest and 5.7 miles southeast of this site, respectively. Water levels for these wells do not fluctuate much but do show the effects of climatic conditions, that is, rising water levels during wet years (recharge) and gradually declining water levels during dry years. The water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 1998). Hydrographs for these two wells are included with this report.

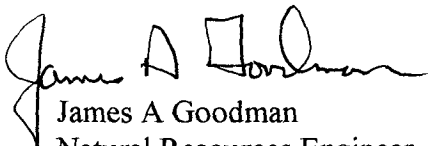
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There is an existing Water Right No. 5598-3 which is about 3 miles south of this application and apparently obtains water from the Codell aquifer. Also there is a deferred water permit application No. 3929-3 located about 7 miles southeast of this application but this application proposed to obtain water from the Niobrara Formation. There are no other ground water permits/rights in this area. Interference is not a concern. Drawdown will be created by pumping at a rate of 150 gpm, but this will not be a continuous use and should not cause significant drawdown very far from the production site. Both the Codell and Niobrara aquifers are widely

used for domestic water supplies in this area. It is not expected that diversions from the Codell aquifer will affect water levels from the Niobrara aquifer.

CONCLUSIONS

1. Water is available from the Codell aquifer.
2. The aquifer is confined and under artesian conditions. Drawdown will result from pumping but this should not be significant or affect the water supply from the aquifer.
3. The wells authorized by this application must be constructed in accordance with SD Well Construction Standards.
4. Plans and Specifications for this facility must be submitted to and approved by the Division of Environmental Services, Surface Water Quality Program.



James A Goodman
Natural Resources Engineer

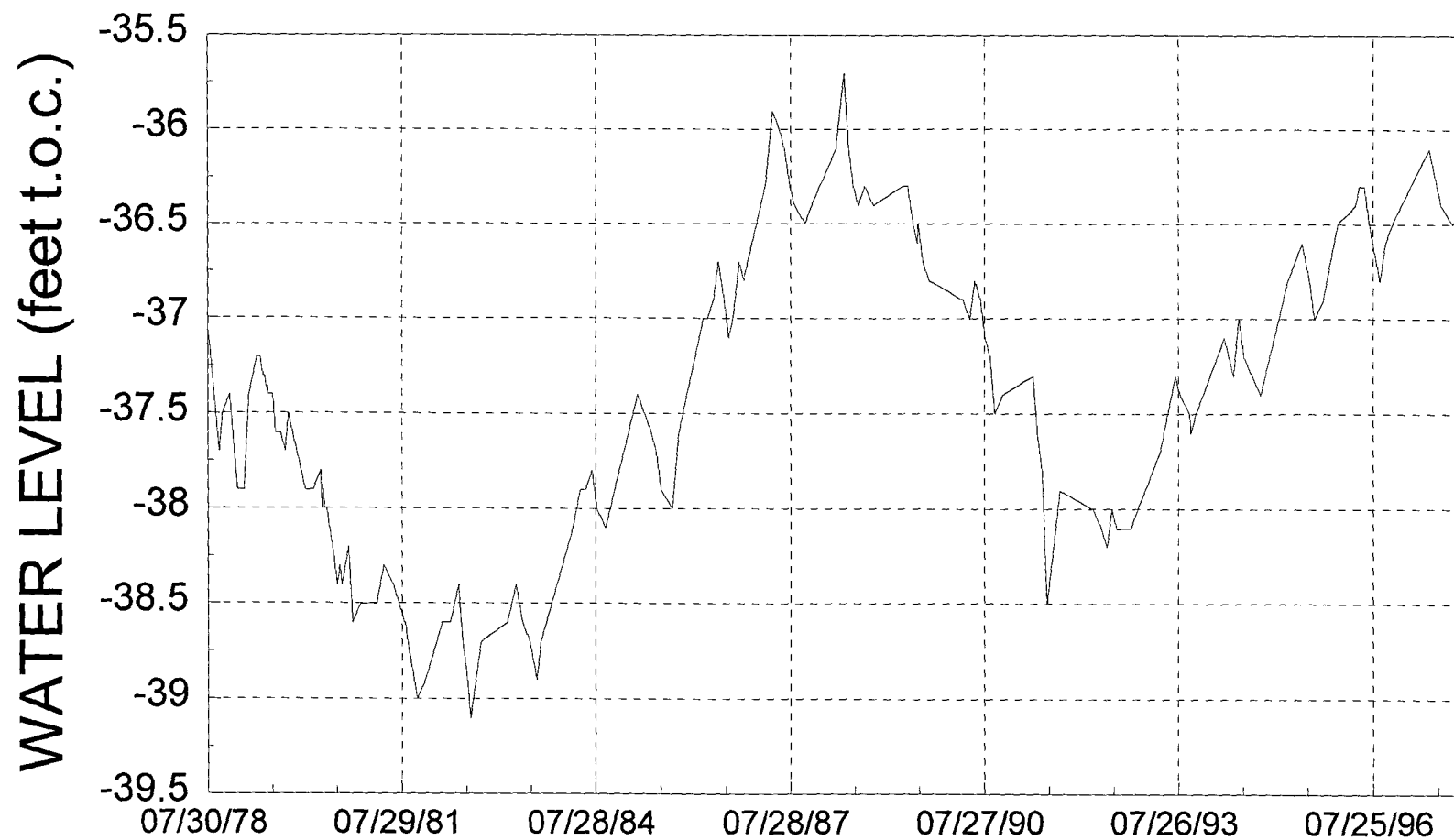
BIBLIOGRAPHY

Hamilton, L.J., 1985, Water Resources of Aurora and Jerauld Counties, South Dakota, USGS WRI 84-4030, USGS, Huron, SD, 57350.

Water Rights, 1998, Unpublished Observation Well Data for Sanborn and Aurora Counties, SD DENR, Division of Environmental Services, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS OBSERVATION WELL

AU-78G



WATER RIGHTS OBSERVATION WELL

SA-77A





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 10, 1998

Mike Cypher
Land O'Lakes, Inc.
26443 461st Avenue
Hartford, SD 57033

Dear Mr. Cypher:

Please find enclosed the reports and Chief Engineer's recommendations for Water Permit Application Nos. 6039-3 (Hasselquist & Sikkink) and 6041-3 (Thompson). A copy of the report and recommendation has also been sent to the applicant.

Sincerely,

A handwritten signature in cursive script that reads "Eric Gronlund".

Eric Gronlund
Water Rights Program
(605) 773-3352

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 10, 1998

Paul Thompson
Thompson Farms, Ltd.
39313 240th Street
Letcher, SD 57359

Dear Mr. Thompson:

Enclosed is a copy of the report and recommendation prepared for Water Permit Application No. 6041-3.

Sincerely,

Eric Gronlund
Water Rights Program
(605) 773-3352

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 10, 1998

Susan Steele
Steele & Steele
P.O. Box 577
Plankinton, SD 57368

COPY

Dear Ms. Steele:

Please find enclosed the information you requested on Water Permit Application No. 6041-3,
Thompson Farms.

Sincerely,


Eric Gronlund
Water Rights Program
(605) 773-3352

enclosure

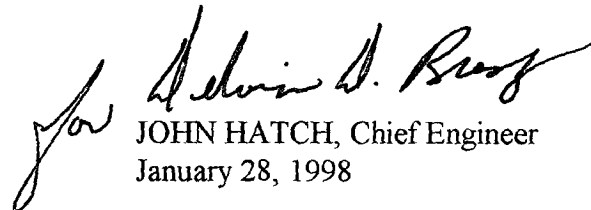
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6041-3, Thompson Farms, Ltd.**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6041-3, Thompson Farms, Ltd., c/o Paul Thompson, 39313 240th Street, Letcher, SD 57359.

The Chief Engineer is recommending APPROVAL of Application No. 6041-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Permit No. 6041-3 is subject to compliance with requirements of the General Water Pollution Control Permit for animal feeding operations.
2. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The wells authorized by Permit No. 6041-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. Permit No. 6041-3 is subject to compliance with the existing and applicable Water Management Rules:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

See report on application for additional information.


JOHN HATCH, Chief Engineer
January 28, 1998



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

January 22, 1998

Thompson Farms Ltd.
Paul Thompson, President
39313 240th St.
Letcher, SD 57359

Dear Mr. Thompson:

Water Permit Application No. 6041-3 for commercial use and livestock confinement facility has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the South Dakota Mail printed at Plankinton, SD (Ph # (605) 942-7770). For your information, a copy of the notice of hearing is enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions. The report and chief engineer's recommendation on the application will be sent to you in advance of the hearing scheduled for February 25, 1998.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

February 22, 1998

South Dakota Mail
Box 367
Plankinton, SD 57368-0367

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 6041-3 to be published twice. Please publish the first notice on January 29, 1998, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Thompson Farms Ltd., Paul Thompson, president, 39313 240th St., Letcher, SD 57359 (Ph # (605) 248-2582).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on January 29, 1998, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6041-3 to Appropriate Water

Notice is given that Thompson Farms Ltd., Paul Thompson, Pres., 39313 240th St, Letcher SD 57359 has filed an application for a water permit to appropriate 0.333 cubic feet of water per second (150 gallons per minute) from three wells (Codell Aquifer) 200 feet deep located in the SW 1/4 NW 1/4 Section 13-T105N-R63W. The water is for commercial use in a cow dairy facility.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6041-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 16, 1998. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 11:00 a.m. (CST), February 25, 1998, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. The February 25, 1998, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by February 16, 1998.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by February 16, 1998, at the above Water Rights Program address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

**No. 6041-3 to
Appropriate Water**

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6041-3 because: 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre, SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 16, 1998. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 11:00 a.m. (CST), February 25, 1998, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. The February 25, 1998, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by February 16, 1998.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer, and may present evidence or cross-examine witnesses, according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court, as provided by law. Contact Eric Gronlund by February 16, 1998, at the above Water Rights Program address, to request copies of information pertaining to this application, to assure access to the hearing by the handicapped, or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

Nettie H. Myers, Secretary,
Department of Environment
and Natural Resources

2-tc.-FEB. 5

STATE OF SOUTH DAKOTA)
County of Aurora) SS

I, J. P. Stodeny, Jr.

from the South Dakota Mail
Newspaper

printed and published in Plankinton

County of Aurora and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

January 29, 1998

February 5, 1998

Cost of Printing \$58.02

(Signature)

Publisher
(Title)

2-5-98
(Date Signed)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

FACSIMILE TRANSMITTAL COVER SHEET

TRANSMITTAL DATE: February 10, 1998

PLEASE DELIVER THE FOLLOWING PAGE(S) TO:

NAME: Susan Steele

DESTINATION: _____

ADDRESS: _____

PHONE: _____

FAX: 605 942-7641

MESSAGE: Here is the information from the file on Water Permit Application No. 6041-3. I found in the file that wells were drilled on January 15, 1998 and the submitted well completion report is attached. Hard copy w/map being submitted via mail.

FROM: Eric Gronlund

AGENCY: DENR/WATER RIGHTS PROGRAM

ADDRESS: JOE FOSS BUILDING, 523 EAST CAPITOL, PIERRE, SD 57501-3181

PHONE: (605) 773-3352 FAX: (605) 773-4068

****THIS TRANSMISSION INCLUDES 9 PAGES INCLUDING THIS PAGE****

IF THERE IS ANY PROBLEM WITH THIS TRANSMITTAL, PLEASE CALL (605) 773-3352.

THANK YOU.

**SOUTH DAKOTA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL AVENUE
PIERRE, SOUTH DAKOTA 57501-3181**

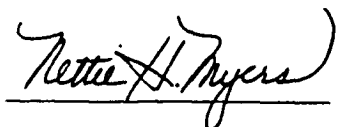
**GENERAL WATER POLLUTION CONTROL PERMIT FOR
CONCENTRATED ANIMAL FEEDING OPERATIONS**

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. 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 February 10, 1998.

This permit and the authorization to discharge shall expire at midnight, February 10, 2003.

Signed this 29th day of January, 1998.

A handwritten signature in cursive script, reading "Nettie H. Myers", is written over a horizontal line.

Authorized Permitting Official

Nettie H. Myers
Secretary
Department of Environment and Natural Resources

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I. EFFLUENT LIMITATIONS

A. Definitions.

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 D shows the actual amount of rainfall that constitutes the 25-year, 24-hour storm event for South Dakota.
2. "Animal feeding operation" is a 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.
3. "Animal unit" is a unit of measurement to determine if a producer needs to obtain coverage under this general permit. The term animal unit applies to the maximum number of animals that will likely be confined at that operation at any one time. For a comparison of animal units to the number of animals in an animal feeding operation, please see the following table:

Comparison of Number of Animals in Feeding Operation to Animal Units		
Type of Animal Feeding Operation	Number of Animals in Unit	
	300 AU	1,000 AU
Slaughter or Feeder Cattle	300	1,000
Dairy (mature - milked or dry)	200	700
Dairy Heifers	300	1,000
Horses	150	500
Sheep or Lambs	3,000	10,000
Turkeys	16,500	55,000
Chickens (hens or broilers)	9,000	30,000
Ducks	1,500	5,000
Geese	1,500	5,000

Reference: ARSD 74:52:02:29.

3. "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.
4. 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. 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.

5. A "Concentrated Animal Feeding Operation" is an animal feeding operation that is subject to the terms and conditions of this permit. An animal feeding operation is subject to this permit if one or more of the following criteria are met:
 - a. The operation feeds or maintains more than 1,000 animal units (see definition of animal unit)
NOTE: Animal units also include the number of swine at the feeding operation. To determine the animal unit equivalency for swine, see the definition of animal unit in the General Permit for Concentrated Swine Feeding Operations - Permit No. SDG-0440000. Other animals not listed in the definition for animal unit may be considered on a case-by-case basis.
 - b. Local level of government requires the producer to obtain coverage under this permit; or
 - c. The Secretary designates the feeding operation as a concentrated animal feeding operation considering the following factors:
 - 1) The size of the animal feeding operation and the amount of manure or process wastewater reaching waters of the state;
 - 2) The location of the animal feeding operation in relation to waters of the state;
 - 3) The means of conveyance of manure and process wastewater into waters of the state; and
 - 4) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of manure and process wastewater into waters of the state.
6. "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.
7. "Livestock auction agency" means a livestock marketing facility as defined in SDCL 40-15.
8. "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.
9. "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.
10. "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.
11. "Process wastewater" means any process generated wastewater and any precipitation (rain or snow) that comes into contact with the animals, manure, litter or bedding, feed, or other portions of the animal feeding operation. The term includes runoff from an open lot.
12. "Process generated wastewater" means water directly or indirectly used in the operation of an animal feeding operation. The term includes spillage or overflow from watering systems; water and manure

collected while washing, cleaning or flushing pens, barns, manure pits or other areas; water and manure collected during direct contact swimming, washing or spray cooling of animals; and water used in dust control.

13. "Producer" means the owner or operator of the concentrated animal feeding operation.
14. "Secretary" means the Secretary of the South Dakota Department of Environment and Natural Resources, or authorized representative.
15. "Shall" means that the condition is an enforceable requirement of this permit.
16. "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.
17. "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.

B. How to Obtain Coverage Under This Permit.

1. Applicability of General Permit. This permit is applicable to all animal feeding operations that meet the definition of a Concentrated Animal Feeding Operation. The conditions of this permit are not applicable to concentrated swine feeding operations. Concentrated swine feeding operations must meet the conditions of the General Water Pollution Control Permit for Concentrated Swine Feeding Operations - Permit No. SDG-0440000.

All producers that own or operate concentrated animal feeding operations and submit plans and specifications 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. Plans and specifications must include the legal name and address of the owner, the facility name and address (if different than the owner), and the receiving stream(s) of any potential discharge from the facility. All permitted concentrated animal feeding operations must operate under the terms and conditions specified in this permit. The Secretary may require an existing animal feeding operation to obtain coverage under this permit based on the factors identified in I.A.5.c. on page 4 of this permit and complaint(s). The Secretary encourages feeding operations that do not meet the definition of concentrated animal feeding operations 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.

Livestock auction agencies are not required to obtain coverage under this permit. However, livestock auction agencies are still regulated under the state and federal water pollution control regulations and laws. Therefore, a livestock auction agency must obtain coverage under a water pollution control permit to lawfully discharge pollutants to waters of the state.

2. Request for Authorization.

- a. Application Requirements for new or expanding concentrated animal feeding operations. The producer shall submit plans and specifications for the manure management system, a nutrient management plan, an operation and maintenance guideline, and a Certification of Applicant Form (see Section III.G. on page 24 for signatory requirements. See Appendix A for a copy of this form.). The plans and specifications must include all components of the manure management system. In accordance with SDCL 34A-2-27, construction of the manure management system cannot proceed until the Secretary approves the plans and specifications.

The plans and specifications, nutrient management plan, operation and maintenance guideline, and the Certification of Applicant Form shall be submitted to the Secretary at least 60 days prior to anticipated construction. The plans and specifications shall be stamped and signed by a South Dakota-licensed professional engineer. The plans and specifications, nutrient management plan, and operation and maintenance guideline shall include all necessary items to show that the animal feeding operation will comply with the terms and conditions of this permit once constructed. If the Secretary determines that the 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. If the Secretary denies an application, the Secretary shall give written notice of the denial to the applicant. The applicant may request a hearing before the Secretary in writing. The hearing shall be held within thirty (30) days of receipt of the written request. The Secretary may affirm, modify, or reverse the initial decision based upon evidence presented at the hearing.

- b. Application Requirements for existing animal feeding operations. Upon receipt of a signed complaint form, the Secretary will determine whether an existing animal feeding operation 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 that inspection, whether an individual discharge permit is required, or whether coverage under this permit is required. The Secretary will use the following criteria to determine the items that a producer with an existing feeding operation must submit to obtain approval under this permit. All plans and specifications for manure management systems must be stamped and signed by a South Dakota-licensed professional engineer:

- 1) Open or housed lot without a manure management system. The producer shall follow the application requirements in Section I.B.2.a.;
- 2) Open or housed lot with an existing manure management system built prior to the effective date of this permit. The producer shall submit 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(s) and the calculated capacity of the structures. Also, the producer shall submit any information that is available detailing the construction of the structure(s) to include as-built drawings, cross-sectional views of the structure(s), location and type of piping, etc. If the system has not been previously approved by the department and does not have a minimum of 180 days of manure storage and cannot contain the 25-year, 24-hour storm, additional storage will be required. Plans and specifications for the additional storage structure(s) need to be submitted to the department

- for approval and must meet the requirements of this permit. The producer must also submit a nutrient management plan, operation and maintenance guideline, and a Certification of Applicant Form (see Section III.G. on page 24 for signatory requirements). The producer shall also submit drilling logs consistent with Item 9 on page 16 showing the permeability of the soils underlying the existing containment structure or provide other documentation showing the containment structure complies with the seepage requirements on page 13 - item d.1)c). Upon approval, the producer must operate the manure management system in compliance with the terms and conditions of this permit;
- 3) If there is evidence of leakage from the existing manure containment structure(s), the producer shall conduct an assessment of the site to determine the extent of leakage and the area that has been polluted. The results of the assessment must be submitted to the department for review. If ground or surface water resources in the area are impacted, remedial cleanup and repairs to the structures will be necessary before the Secretary can approve the site for operation; and
 - 4) Any manure management systems built after the effective date of this permit must meet all permit requirements in order to obtain approval from the Secretary.
- c. Obtaining final coverage under the general permit. To obtain final coverage under this permit, the producer shall submit the Notice of Completion to the Secretary. If the feeding operation has met the conditions of approval, 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.

Producers that have approved plans and specifications, but do not have a Certificate of Compliance, need only submit the Notice of Completion and Certification of Applicant Forms (See Section III.G. for signatory requirements). Producers with approved plans and specifications and a Certificate of Compliance must only submit a letter to the Secretary requesting coverage under this general permit, along with the Certification of Applicant Form (See Section III.G. for signatory requirements). Upon verification of compliance with the terms and conditions of the plans and specification approval, the Secretary will send a letter to the producer authorizing coverage under the terms and conditions of this permit including the date coverage begins.

By January 1, 1999, a producer that has obtained coverage under this permit must submit verification that the producer has taken an environmental training course pertaining to proper operation and maintenance of a manure management system and proper natural resource management (See Page 18, item I.D.3.f.). After January 1, 1999, any producer that is required to obtain coverage under this permit must submit this verification before the Secretary will issue a certificate of compliance.

If the Secretary has approved a design prior to the effective date of this permit, the producer can obtain coverage under this permit without modifying the manure management system used at that feeding operation. However, the producer shall be required to submit a nutrient management plan and operation and maintenance guideline if one has not already been approved, and operate the feeding operation in compliance with the terms and conditions of this permit. Should violations occur due to design deficiencies, the Secretary may require modifications to the manure management system, to include additional storage, to ensure compliance with this permit.

- d. 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.
- e. 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 57501-3181
Telephone: (605) 773-3351
Fax: (605) 773-5286

3. Responsibilities upon Authorization. Producers shall operate their feeding operation in accordance with: the approved plans and specifications (see I.B.2. starting on page 6); the conditions of this permit; the Best Management Practices (see I.D.3. starting on page 9) required by this permit to be implemented; and the approved Operation and Maintenance Guideline and Nutrient Management Plan.

C. Notice of Permit Termination and Closure Requirements.

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 B of this permit for this notification.
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 shall use the form in Appendix B 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.
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.

D. Permit Conditions.

1. Effluent Limits.

- a. 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.
 - b. 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 rainfall event, either chronic or catastrophic, 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. Should a discharge occur, the producer shall keep rainfall records to document that a 25-year, 24-hour rainfall event occurred. The producer may use an ordinary rain gauge to determine rainfall amounts.
 - c. Manure and Wastewater Land Application Sites. 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 manure or wastewater land application sites. A discharge of manure or process wastewater may occur from these sites only when chronic or catastrophic rainfall events occur. The producer shall keep rainfall records to document that a 25-year, 24-hour rainfall event occurred. The producer may use an ordinary rain gauge to determine rainfall amounts.
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 (see I.B.2. starting on page 6); and the Best Management Practices (see I.D.3. starting on page 9) required by this permit to be implemented. The producer shall prepare and follow an Operation and Maintenance Guideline and Nutrient Management Plan using Best Management Practices.
 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 Plan. 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.
 - a. Location Standards. This section establishes the minimum standards that the producer shall consider when selecting a site for a new concentrated animal feeding operation.
 - 1) 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.
 - 2) The producer should take every precaution to minimize the possibility of exposing the public to nuisance conditions and prevent locating an animal feeding operation in an area unsuitable or inappropriate. Factors that the producer should consider are:

- a) Distance to roads, homes, churches, schools, residential and recreational areas, towns, cities, etc.;
 - b) Prevailing wind direction;
 - c) Fencing the lagoon or containment structure for safety and posting signs around the structure;
 - d) Planting trees or shrubs to screen the lagoons or containment structure to help control odors and improve aesthetics; and
 - e) Distance to public and individual water supplies.
- 3) 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:
- a) Soil conditions;
 - b) Depth to the aquifer;
 - c) Distance from the feeding operation to the aquifer and nearby drainages, streams, rivers, lakes, wetlands, etc.;
 - d) Ground water conditions such as ground water flow rate, quality, and aquifer recharge or discharge conditions;
 - e) Active natural processes such as flooding, erosion, settling, submergence, etc.;
 - f) Local weather conditions; and
 - g) Terrain slopes.
- 4) 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.
- 5) 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.
- 6) The producer shall maintain appropriate buffer zones around wastewater containment structures or lagoons or land application areas for manure disposal.
- 7) The producer should maintain appropriate distances from neighbors, cities, and other residential areas. Sites proposed in areas located in predominately upwind direction from residential areas should be avoided.
- b. 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. 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:

- 1) 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, process wastewater, and the 25-year, 24-hour rainfall event. See Appendix G, Cross Section of Manure Storage Structure, for a drawing detailing this requirement;
- 2) 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;
- 3) Uncontaminated storm water runoff shall be diverted away from the containment structure whenever possible;
- 4) 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;
- 5) 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. A minimum of one marker is required at the maximum operating level of each containment structure. 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;
- 6) 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;
- 7) Wastewater containment structures or the manure and wastewater disposal 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 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;
- 8) Manure holding ponds (South Dakota Technical Guide #425; NRCS; 5/94), waste storage ponds (South Dakota Technical Guide #425; NRCS; 5/94), or waste storage pits or tanks (South Dakota Technical Guide #313; NRCS; 2/93) shall be designed based on the minimum storage time of 270 days and must include all sources of manure and process wastewater that will enter the containment structure;
- 9) Anaerobic lagoons (South Dakota Technical Guide #359; NRCS; 2/93) shall be designed 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;
- 10) Naturally aerobic lagoons (South Dakota Technical Guide #359; NRCS; 2/93) shall be designed based on daily biochemical oxygen demand (BOD₅) loading per acre of lagoon. The loading rate for an aerobic lagoon shall not exceed 25 pounds of BOD₅ per acre of lagoon per day. Loading rates less than 25 pounds are allowed. The maximum depth of liquid shall be five feet;

- 11) For mechanically aerated lagoons (South Dakota Technical Guide #359; NRCS; 2/93), the aeration equipment shall provide a minimum of one pound of oxygen for each pound of (BOD₅) per day. The minimum depth of liquid shall be 6 feet;
 - 12) Manure containment structures shall provide for a minimum design capacity of 270 days of storage. This section does not apply to manure stockpiling areas as described in Section I.D.3.d.5). The design volume includes the following:
 - a) Liquid and solid manure and process generated wastewater;
 - b) Process wastewater to include the mean annual runoff and annual precipitation on the pond (if the structure receives runoff from the lots or pens);
 - c) Net annual evaporation from the pond surface calculated when the wastewater level is at the mid-level of the structure;
 - d) 25-year, 24-hour precipitation on pond surface and runoff (if structure receives runoff from an open lot);
 - e) Additional water necessary to meet volatile solids loading or other loading rates specified in items 9, 10, and 11 listed above, if the structure is an anaerobic, naturally aerobic or mechanically aerated lagoon; and
 - f) Solids accumulation. 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.
 - 13) 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;
 - 14) Interior and exterior slopes of earthen embankment walls of containment structures shall be no steeper than one foot vertical to three feet horizontal;
 - 15) Earth embankments of any containment structure shall have a top width of at least 10 feet; and
 - 16) Any earthen containment structure having a surface area of five acres or more at maximum depth shall be provided with erosion protection.
- c. 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:
- 1) Practices to decrease the lot runoff and water volume are as follows:
 - a) Divert runoff from clean areas above lot by constructing ditches, terraces, and waterways above an open lot;

- b) Install gutters, downspouts, and buried conduits to divert roof drainage;
 - c) Provide more roofed area;
 - d) Decrease open lot surface area;
 - e) Repair or adjust waterers and water systems to minimize water wastage;
 - f) Use practical amounts of water for cooling purposes; and
 - g) Recycle water if practical and applicable.
- 2) Practices to decrease the potential of discharging manure and process wastewater to surface waters are as follows:
- a) Collect manure more frequently;
 - b) Eliminate areas that slope in directions such that wastewater or rainfall runoff cannot be collected;
 - c) Collect and allow wastewater to evaporate;
 - d) Collect and evenly apply wastewater and manure to land only during dry weather;
 - e) Do not stockpile manure near watercourses. **Note:** The producer shall not stockpile manure in an area that will pollute waters of the state;
 - f) Avoid land that is susceptible to excessive water erosion; and
 - g) Utilize off-site areas for manure application consistent with Best Management Practices, good agricultural practices, and the Nutrient Management Plan.
- 3) If applicable, the producer should collect manure that accumulates along holding pens or open lot fence lines, in feeding lanes, and feed storage areas on a weekly basis.
- d. Ground Water Protection. Where the potential exists for the contained manure or process wastewater to contaminate ground water, 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:
- 1) All new or modified wastewater containment structures that have liners constructed of compacted or in-situ earthen materials shall meet the following minimum requirements:
- a) 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 A1-34 AWMS Pond Clay Liners; 2/93);
 - b) Earthen liners shall be 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 A1-34 AWMS Pond Clay Liners; 2/93);
 - c) Hydraulic conductivity equal to or less than 1×10^{-7} centimeters per second (cm/sec) or 1/16 inch per day at maximum operating depth;
 - d) Soil compaction for liners and embankments shall be done according to standard proctor density at optimum moisture content plus or minus two percent or according to the recommendations of the soils testing laboratory;

- e) 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: a pond liner was 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 must be submitted to the secretary along with the notice of completion form; and
 - f) A minimum thickness of compacted soil liners of 1.5 feet on the bottom and sides after compaction.
- 2) 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 d.1)c) above. Alternative liner materials include flexible membrane linings, asphalt-sealed fabric liners, and bentonite sealants.
- 3) 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. References for concrete design are found in the following sources:
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- a) Waste Storage Structure Design Standard 313 (February 1993) and Design Technical Note No. 24 (December 14, 1993) available from the Natural Resources Conservation Service;
 - b) Midwest Plan Service (MWPS-36) *Concrete Manure Storage Handbook* (1994 Edition) available from the Extension Service;
 - c) American Concrete Institute Standards 318-89 (Rev. 1992) *Building Code Requirements for Reinforced Concrete*; and
 - d) American Concrete Institute Standards 350R-89 and 350IR-93/AWWA(1994) *Environmental Engineered Concrete Structures*.
- 4) Livestock shall be prohibited entry into earthen containment structures or on its dikes, and the immediate surrounding area to ensure protection of the liner.
- 5) If stockpiling of manure is a usual practice at an animal feeding operation, the producer shall construct a 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 1×10^{-7} centimeters per second (cm/sec),

a liner will not be required. The runoff from the stockpile may be directed into the containment structure in lieu of building a separate containment structure.

- 6) 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.
- 7) Depending on the 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 a) through c) 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 F of this permit to determine whether a ground water discharge permit or ground water monitoring is required.
 - a) The feeding operation is located over a mapped aquifer included in the statewide ground water quality monitoring network. In Appendix E of this permit, a map of these aquifers is included. This map only serves as a general guide to the location of these aquifers. County studies and other information shall be used, where available, to better determine more precise aquifer locations. Aquifer boundaries shown in Appendix E are drawn at the discretion of geologists and hydrologists based on best available information. Therefore, actual site specific aquifer boundaries may differ from the attached map and other information. On-site hydrogeologic information is necessary to verify the location of an underlying shallow aquifer in relation to a feeding operation (see item 9) on page 16).
 - b) The feeding operation is located over an aquifer not shown on the map in Appendix E, 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.
 - c) As determined by the Secretary on a site-by-site basis.
- 8) If ground water monitoring is required, a South Dakota-licensed well driller must install the wells.

The producer shall sample the monitoring wells on a quarterly basis (January, April, July, and October) for the following parameters:

- a) Total dissolved solids
- b) Sulfate, Dissolved;
- c) Nitrate as Nitrogen;
- d) Ammonia - Nitrogen, Dissolved $\text{NH}_4 + \text{NH}_3$ as N
- e) Chloride, Dissolved; and
- f) Water table elevations.

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

Ground Water Quality Program
Department of Environment and Natural Resources
523 E. Capitol
Pierre, SD 57501-3181
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.

- 9) The producer must provide the drilling logs and the relative elevation of the top of the boring from soil borings in the vicinity of the containment structure. There shall be a minimum of two soil borings per site or at least one boring per acre of containment structure surface area. All borings shall be within 200 feet of the proposed location of the containment structure, and all borings must 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. Continuous in-situ samples must be collected from the deep boring and the samples must be retained by the producer until the Secretary grants approval for the plans and specifications. 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 must extend to a minimum of 25 feet below the ground surface and may stop when one of the following criteria has been met:
 - a) At least 15 continuous feet of extremely low permeability, geologic material (unweathered clayey till or shale) is encountered in the boring;
 - b) 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;
 - c) The boring reaches an aquifer; or
 - d) A total depth of 100 feet.
- e. Feedlot Manure Utilization or Disposal by Land Application. The producer is responsible for the safe utilization of manure and process wastewater generated at the animal feeding operation.

The following items establish the minimum standards for the safe disposal of manure and process wastewater and shall be followed by the producer. NOTE: Producers subject to this permit are required to develop and submit a nutrient management plan to the department for approval (see Section I.D.4. starting on Page 18).

- 1) Containment structures shall be equipped with either irrigation, evaporation, liquid removal systems, or a combination of these systems. These systems shall be capable of dewatering the containment structures. The producer shall maintain freeboard in the manure containment structure at all times as required by Section I.D.3.b.1) on page 10 of this permit. For open lots, the producer shall restore the storage capacity necessary to contain the 25-year, 24-hour rainfall event 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. The maximum operating level is the elevation in the containment structure necessary to contain the designed storage of accumulated manure and process wastewater and any solids accumulation (See Appendix G - Cross Section of Manure Storage Structure). Producers that operate open lots shall have equipment capable of dewatering the containment structures available at all times.
- 2) The producer shall dispose of solids, sludges, manure, or other pollutants in a manner to prevent pollution of surface or ground water.
- 3) Spray Irrigation. Spray irrigation is allowed for land application of manure provided the producer incorporates the manure within 24 hours of application. The producer must maintain at least a 50-foot buffer zone to any natural or manmade drainage.

If the application area is a cropped field, alfalfa, grass or pasture land, incorporation is not required. However, the producer shall maintain at least 200-foot wide buffer zones between the spray irrigation application area and any natural or manmade drainage.

If the application area is no-till cropland, incorporation is not required. The producer shall maintain at least a 50-foot buffer zone to any natural or manmade drainage.

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) Fields should be diked or terraced to prevent the release of applied wastewater;
 - b) Land to be irrigated should have a slope less than 6%;
 - c) Highly erodible soils due to water erosion should be avoided;
 - d) Irrigation practices should be managed to prevent ponding of wastewater on the land application site;
 - e) Application of manure shall not exceed the water storage capacity of the soil; and
 - f) Process wastewater or manure shall not be spray irrigated on frozen ground.
- 4) Surface broadcast, injection, or incorporation of manure. The producer shall inject, or incorporate any liquid manure or wastewater within 24 hours of application to nonvegetated cropland. The producer shall inject, or incorporate, any solid or semi-solid manure within five days of application to nonvegetated cropland. The producer shall maintain at least a 50-foot buffer zone to any natural or manmade drainage.

If the manure is surface broadcast to cropped fields, grass, alfalfa, or pasture land, incorporation is not required. However, the producer shall maintain at least 200-foot wide buffer zones between the disposal areas and any natural or manmade drainage.

If the application area is no-till cropland, incorporation is not required. The producer shall maintain at least a 50-foot buffer zone to any natural or manmade drainage.

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) All manure stockpiles should be removed and land applied as soon as practicable. Application of dry or solid manure on frozen or snow-covered ground should be avoided when possible. 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 200-foot buffer zone to any natural or manmade drainage;
- b) Land to receive manure should have a slope less than 6%;
- c) Highly erodible soils due to water erosion should be avoided;
- d) 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 shall only apply manure on land with slopes less than 4%. The producer shall also maintain a minimum of a 200-foot buffer zone to any natural or manmade drainage;
- e) A producer may apply manure to property owned by other persons upon obtaining permission from the property owner. Any lands owned by other persons which will be used for manure application by a producer shall be identified in the nutrient management plan, and shall be included in the soil and manure testing procedure described in Section I.D.5. starting on page 20. 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 annual nutrient analysis performed by the producer in accordance with section I.D.5. starting on page 20 of this permit and a list of possible best management practices to ensure protection of surface and ground water.
- f. Training and education. The producer shall participate in an approved environmental training program pertaining to 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. By January 1, 1999, any producer that is covered under the permit shall submit verification that the producer has taken this training. Effective January 1, 1999, the producer must submit this verification with the Notice of Completion required in Section I.B.2.c. on page 7. The Secretary will not provide a certificate of compliance until this verification is received. For information on approved training programs, please contact the department at (605)773-3351.

4. Nutrient Management Plan. The producer may apply manure for the purpose of growing crops. The producer shall develop, maintain, and follow a nutrient management plan to ensure safe disposal of manure and protection of surface and ground water. The nutrient management plan is a planning document to ensure that the producer has enough land available to safely land apply the manure. Therefore, it is important that the nutrient management plan include the proper mineralization rates for subsequent years of manure application to account for the potential buildup of nitrogen. This will ensure adequate land will be available to the producer for land application of manure. For the actual application of manure, the producer shall also follow the soil and manure testing requirements in Section I.D.5. starting on page 20 of this permit.

The producer should review the nutrient management plan annually, and update it when significant changes to crop production or livestock numbers occur or if soil sampling indicates a buildup of nitrogen in the land application areas. Land that is not included in the department-approved nutrient management plan shall not be used for land application of manure. If the producer needs to use other land application areas, the producer must submit a list of the new land with the information listed in items h. through k. below. If other land will not be used for manure application that was in the approved nutrient management plan, the producer also needs to identify those. The secretary will review and approve the new list if it ensures there is still adequate land for manure application.

Appendix C of this permit contains a generic nutrient management plan that the producer may use in developing a nutrient management plan. The generic nutrient management plan is based on application of nitrogen. The producer may use other plans provided the alternate plan contains all the information necessary to determine compliance with conditions of this general permit. Nitrogen, in addition to that allowed in the nutrient management plan, may be applied up to the amounts as indicated by soil nitrogen test results that are necessary to obtain the realistic crop yield.

The Secretary recommends and encourages producers to develop nutrient management plans for other nutrients such as phosphorous. Over application of phosphorous may lead to water quality problems in area lakes and streams and result in potential damage to the producer's land and crop.

As an alternative to a nitrogen-based nutrient management plan, producers regulated by this permit may submit a phosphorus-based nutrient management plan to the department for review and approval. However, because nitrogen poses the greatest risk to ground water quality, the phosphorus-based nutrient management plan must include nitrogen soil and manure testing and total nitrogen application rates as well as phosphorous. Regardless of whether the plan is based on nitrogen or phosphorous, the producer shall follow the manure application requirements in section I.D.3.e. starting on page 16 of this permit to minimize the potential for runoff of manure into surface waters. The producer should routinely take soil samples for phosphorous to ensure the phosphorous levels in the soil are not adversely affecting the crop yields.

The 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 type or types of manure containment structures;

- c. The total number of days of storage in the manure containment structure(s);
- d. The method(s) of manure application;
- e. The maximum amount of livestock that will be confined and the average weight of the animals through the production cycle;
- f. An estimate of the daily and annual amount of manure produced in tons of wet manure;
- g. An estimate of the total nitrogen in pounds that will be available for crop production. The producer may use either estimated nutrient concentrations 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 nitrogen available, the source of the estimated concentrations of nitrogen shall be provided;
- h. 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 areas that cannot or will not be used for manure application shall not be included in the total number of acres available for land application. Also, if either this permit or local governments require setback distances or buffer zones, those areas within those buffer zones shall be identified on the field maps and cannot be included in the total number of acres;
- i. A detailed map showing the outline of each field listed in item h. and all buffer zones and separation distances required by this permit;
- j. A soils map for the land application fields and a description of the predominate soil type(s) for each field;
- k. Realistic yield goals for each field and crop listed in item h. 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 agent shall be included in the plan specifying that the yield is realistic for that crop in that area;
- l. Determination of the total amount of nitrogen that can be applied to each field based on the crop planted at the field, the realistic yield goal, and any residual nitrogen left in the field from past agricultural practices or crops;
- m. Comparison of the total nitrogen requirement for each field to the total nitrogen available in the manure. If the nitrogen in the manure exceeds the field nitrogen requirements, the producer shall identify additional land that can be used for the application of manure;
- n. The application rate of the manure to ensure the nitrogen requirement of the crop(s) will not be exceeded;
- o. 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 nutrient management plan; and

p. Times of the year that land application is planned.

5. Soil and Manure Testing. The producer shall use the following procedure to determine the appropriate application rates of manure and process wastewater. Upon determining this application rate, the producer shall apply the manure and process wastewater according to this calculated rate. Applying manure above the calculated rate is a violation of this permit. The following is the procedure for calculating the application rate:

- a. The producer must take annual soil samples to a depth of two feet. The Secretary will determine on a case-by-case basis whether a land application site is located over a shallow aquifer. If manure application sites are located over shallow aquifers, the producer shall take soil samples from both 0 to 2 feet and 2 to 4 feet;
- b. A minimum of 15 soil sample cores shall be taken from each field or landscape position to determine the residual nitrogen in the field;
- c. Those cores that represent similar soil and landscape position may be composited into one sample. All samples, either individual or composited, must be analyzed for nitrate-nitrogen;
- d. 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 and inorganic nitrogen. Organic nitrogen is equal to the total nitrogen minus the inorganic nitrogen;
- e. Based on the soil testing, types of crops, expected yields, 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 nutrient management plan. The producer may use the yield goal that is reasonably expected to be obtained from that field. The total nitrogen that can be applied shall be determined as follows:
 - 1) 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. Nitrogen requirements for selected crops can also be found in Table 6 in Appendix C of this general permit. The source of the data in Table 6 is SDSU Extension Publication EC750, January 1996, and the South Dakota State University Extension Service;
 - 2) The following nitrogen credits must be subtracted from the total nitrogen value determined in item 1) above:
 - a) The results from the two-foot nitrate soil test conducted in accordance with item a. on page 20. 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).

- b) Any legume credits. For legume credits, please see SDSU Extension Publication EC 750, Fertilizer Recommendation Guide, January 1996. These same values are found in Table 4 on page C-10 of Appendix C.
 - c) 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 (item 1) above) 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.
 - d) The resulting value in pounds of nitrogen per acre is the application rate of the additional nitrogen that may be applied to the field.
- 3) Based on the results of the manure testing required in item d. on page 21, the producer shall apply manure to each field at a rate not to exceed the rate calculated in item e.2)d) 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).
- f. The producer shall keep the following records regarding manure application. These records are to be kept by the producer for a minimum of three years and made available to the department upon request or inspection. Failure to keep these records is a violation of this permit:
- 1) All soil and manure testing results;
 - 2) Nitrogen application rates used during disposal of manure;
 - 3) Fields used during application;
 - 4) Dates and times of application;
 - 5) Records showing the calculations to determine the application rates described above; and
 - 6) Methods of application.
6. Inspection requirements.
- a. The producer shall inspect the manure management system on at least a weekly basis. The inspection is to determine if a discharge is occurring, has occurred since the previous inspection, or if a discharge is likely to occur before the next inspection. In addition, the inspection is to determine if proper operation and maintenance procedures are being followed and if Best Management Practices are being implemented. The producer shall keep documentation of each inspection that the Secretary can review upon request or during an inspection.
 - b. The producer shall inspect the land application site on a daily basis while land application of wastewater is occurring. This inspection is to ensure that runoff from the land application site is not occurring. If a discharge is found, the producer is responsible for taking immediate steps to stop the discharge 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.

7. Other Permit Requirements.

- a. **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 or if the combined maximum pump capacity exceeds 25 gallons per minute. For more information, contact the Water Rights Program at (605)773-3352.
 - b. **Storm Water Construction Permit.** A storm water construction permit is required if five 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.
- E. 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 three 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.
- F. 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. If possible, the producer shall also take immediate steps to stop the discharge and notify anyone downstream that may be impacted by the discharge.
- G. Inspection and Entry. The producer shall allow the Secretary, upon presentation of credentials, to:
1. Enter the premises of an animal feeding operation or where records are kept;
 2. Inspect any animal feeding operation covered under this general permit;
 3. Access and copy, at reasonable times, records specified under this general permit; and
 4. 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.

The Secretary will abide by all security measures implemented by the producer to protect the health of the animals at the animal feeding operation.

II. COMPLIANCE RESPONSIBILITIES

- A. 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 (see Section I.B.2. starting on page 6 of this permit); 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.

- B. 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.
- C. 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.
- D. 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.
- E. 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.
- F. 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 Nutrient Management Plan developed for the feeding operation.

III. GENERAL REQUIREMENTS

- A. 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.
- B. Permit Actions. The Secretary may modify, revoke and reissue, or terminate this permit in accordance with ARSD Chapter 74:52:04. 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.
- C. Duty to Reapply. At 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 renewal form to the Secretary to receive coverage under the new permit.
- D. 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.

- E. 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.
- F. 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.
- G. 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 III.G.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 III.G.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.”
- H. 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.

- I. 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.
- J. Property Rights. Any authorization to operate under the general permit does not convey any property rights or any exclusive privilege.
- K. 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.
- L. Transfers. The Secretary will automatically transfer 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; and
 3. The new owner submits a Certification of Applicant form.

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.

- M. 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.
- N. Requiring an Individual Permit. The Secretary may either deny coverage or require any producer requesting coverage under the general permit to apply for, and obtain, an individual permit. The Secretary's decision to require an individual permit will be primarily based on the ability of the producer, or the producer's past history, to comply with the state's environmental requirements for animal feeding operations.

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

MANURE MANAGEMENT SYSTEM CONSTRUCTION

Please complete this form for receiving a Certificate of Compliance from the Department of Environment and Natural Resources. Please return the form to:

**Surface Water Quality Program
Department of Environment and Natural Resources
Joe Foss Building - 523 E. Capitol
Pierre, SD 57501-3181**

FACILITY (Please print): _____ (PRODUCER)
 LAST NAME FIRST NAME

ADDRESS

CITY	ZIP CODE
ALBANY	12207
ALBANY	12208
ALBANY	12209
ALBANY	12210
ALBANY	12211
ALBANY	12212
ALBANY	12214
ALBANY	12215
ALBANY	12227
ALBANY	12242
ALBANY	12243
ALBANY	12244
ALBANY	12249
ALBANY	12250
ALBANY	12255
ALBANY	12256
ALBANY	12260
ALBANY	12261
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ALBANY	12270
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ALBANY	12296
ALBANY	12299
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ALBANY	12304
ALBANY	12305
ALBANY	12309
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ALBANY	12441
ALBANY	12442
ALBANY	

Construction of the manure management system for the above producer that had plans and specifications approved by letter by the DENR on _____ is completed. The system was designed for a _____ operation for _____ animal units and _____ acres of drainage area. I hereby certify that I am a licensed engineer in the state of South Dakota. To the best of my knowledge, information and belief, the manure management system was constructed in general conformance with the plans and specifications, and in my professional opinion, is in compliance with applicable laws, codes, and ordinances as of the date of construction (or this date).”

Dated at _____, South Dakota this ____ day of _____, 19__.

Design Engineer's Signature

(Stamp)

IN THE MATTER OF THE APPLICATION OF) CERTIFICATION OF
)
)
)
_____) APPLICANT
(Facility name)

STATE OF _____)
)
COUNTY OF _____) SS

South Dakota Codified Laws Section 1-40-27 provides:

- (1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner or resident general manager of the facility for which application has been made:*
 - (a) Has intentionally misrepresented a material fact in applying for a permit;*
 - (b) Has been convicted of a felony or other crime involving moral turpitude;*
 - (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;*
 - (d) Has had any permit revoked under the environmental laws of any state or the United States; or*
 - (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder;*
or
- (2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.*

page 1 of 2

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 _____, 19____.

Applicant Signature

Subscribed and sworn before me this _____ day of _____, 19____.

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 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 57501-3181
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:

- ☐ You are no longer the operator of the facility ☐ Concentrated Animal feeding operation is no longer in operation
☐ 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 owner of the animal feeding operation.

Name (print) _____ Title _____

Signature _____ Date _____

Permit Number: _____	Date Received: _____
Date Terminated: _____	PCS: _____

APPENDIX C

NUTRIENT MANAGEMENT PLAN

APPENDIX C

NUTRIENT MANAGEMENT PLAN

This Nutrient Management Plan was developed for:

Producer or Feeding Operation Name _____
Address _____ County _____
City _____ State _____ Zip Code _____
Plan developed by: _____ Date _____

The General Permit for Concentrated Animal Feeding Operations requires the producer to develop, maintain and follow an approved nutrient management plan. The producer may use this form and check list to aid in the development of the plan. The producer is encouraged to follow and implement as many of the best management practices that are listed in the General Permit as possible. Implementing these practices will ensure protection of the state's water resources.

The producer is responsible for complying with all local ordinances and requirements. The producer shall address all of the following items and incorporate any local requirements into this plan to ensure compliance with both state and local requirements. If you have any questions on completing this form, please call the Department of Environment and Natural Resources at (605)773-3351.

1. Does the county have any ordinances that require special permitting or approvals for siting animal feeding operations or land application of manure? ☐ Yes, ☐ No If yes, has the county permitted or approved this site? ☐ Yes, ☐ No If no, do you intend to get approval or obtain local permits prior to land application of manure? ☐ Yes, ☐ No Application of manure cannot occur until the producer obtains all local approvals.
2. Is the land application area, or any portion, located within the jurisdictional area of a city or town? ☐ Yes, ☐ No If yes, does the city or town have any special permitting for siting animal feeding operations or application of manure within their jurisdictional area? ☐ Yes ☐ No If yes, has the city or town permitted or approved this site? ☐ Yes, ☐ No If no, do you intend to get approval or obtain local permits prior to land application of manure? ☐ Yes, ☐ No Application of manure cannot occur until the producer obtains local approval.
3. Are there specific setback distances that the county or city requires for application of manure?
(For example, some local governments require specific setbacks from residences and public right-of-ways.)
☐ Yes, ☐ No If yes, show the applicable setbacks on the required field maps and exclude these areas from the total number of acres.
4. Is the land application site located in a wellhead protection area? ☐ Yes, ☐ No If yes, the producer needs to contact the local county, city, or public water supply official to discuss specific requirements. Often times, the local planning and zoning official will be aware of the requirements of the wellhead protection program.

THE FOLLOWING NUTRIENT MANAGEMENT PLAN MAY BE USED TO VERIFY THAT ADEQUATE LAND IS AVAILABLE.

5. through 14.: Complete Spreadsheet A on Page C-5 of this document to estimate the total pounds of nitrogen available for crop production over a three year mineralization period.

5. Provide the maximum number of animals for each animal type.
6. Provide the average weight in pounds for each animal type.
7. From Table 1 on Page C-8 enter the pounds of nitrogen produced per day for each animal type.
8. Calculate the total pounds of nitrogen produced per year by multiplying the answers to items #5 and #7 together and multiplying by 365.
9. From Table 2 on Page C-8 enter the percent of nitrogen retained during handling and storage for the manure management system.
10. Calculate the total pounds of nitrogen available for land application by multiplying the answers to items #8 and #9 together.
11. From Table 3 on Page C-8 enter the percent of nitrogen retained for the application method used to apply the manure.
12. Calculate the total pounds of nitrogen retained after application of the manure by multiplying the answers to items #10 and #11 together.
13. From Table 4 on Page C-9 enter the 3-year mineralization rate that most closely describes the manure management system.
14. Calculate the pounds of nitrogen that will be available based on the 3-year mineralization factor by multiplying the answers to items #12 and #13 together.
- 15. through 22.: Complete Spreadsheet B on Page C-6 to provide the necessary information regarding field identifications, locations, and available acres. Attach maps showing the field locations. Include the field identification on the maps for each field. Also attach a soils map for the land application fields and a description of the predominant soil type for each field. List and provide the necessary information for all fields that may be used for manure application.**
15. Provide the field identification for each field to be used for manure application. Provide the field and tract number if available. If the tract and field number is not available, provide a site specific identification that is unique to the field and use the identification to show the field on the required maps.
16. Provide the name of the county that the field is located in.
17. Provide the location of each field, to include the quarter section, township and range. (For example: NW1/4 of Section 16, T117N, R59W)

18. Indicate whether or not the field is owned by the producer. If the field is not owned by the producer, a copy of each written agreement executed with the owner of the land where manure will be applied must be provided with the nutrient management plan.
19. Provide the total number of acres within the boundaries of each field. Ensure that the field boundaries are clearly indicated on the maps submitted.
20. Provide the number of acres excluded from manure application for each field. Indicate the nature of the land excluded from manure application (for example: wetland, river, drainage, etc.) and the setback or buffer applied to the excluded land. Show the excluded land on the maps submitted.

Exclusions From Manure Application:

Setback Distances: Any portion of a field that is within 1,000 feet of an existing public drinking water source or a stream or lake classified as a drinking water source or 250 feet from an existing private drinking water source or well cannot be used as a land application site for manure in accordance with the General Permit. Also, any portion of a field within 150 feet of a drinking water source or well that is owned by the producer also cannot be used for land application of manure. A field, or portions of the field, cannot be used if it does not meet any local setback distances in local zoning regulations. The number of acres must only include tillable acres and cannot include streams, non-farmed wetlands, lakes, or applicable buffer zones to water bodies in determining the total amount of acres.

Buffer Zones: If the manure is surface broadcast to cropped fields, grass, alfalfa, or pasture land, the producer shall maintain at least 200-foot wide buffer zones between the disposal areas and any natural or manmade drainage. If the manure is injected or surface broadcast on no-till cropland, the producer shall maintain at least a 50 foot buffer zone to any natural or manmade drainage.

21. Calculate the net acres available in each field for manure application by subtracting the answer to item #20 from item #19.
22. Indicate whether the field is irrigated.
23. through 30.: Complete Spreadsheet C on Page C-7 to provide the necessary information regarding crops to be grown and nitrogen needs.
23. Enter the type of crop grown the year prior to the nutrient management plan and the types of crops generally grown for three consecutive years thereafter.
24. Enter the crop yield goals for the types of crops entered in item #23. 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 Agriculture Statistics Service using the published continuous five-year average yield plus ten percent. Proof of field-by-field or farm-by-farm yields must be based on an average of actual crop receipts from a minimum of three consecutive years. A copy of the multi-peril crop insurance or crop receipts for three consecutive years must be provided to the department if these are used to establish the yield goals. If there is no information available for a crop and field listed in the nutrient management plan, documentation from the local extension service agent must be included with the plan specifying that the yield is realistic for that crop and field.

25. Enter the nitrogen requirements from Table 6 on Page C-10 for the crop to be grown.
26. Enter the nitrogen credit for the field. If soil sampling has not been performed, a nitrogen credit of 40 pounds per acre shall be used for recropped fields, and 75 pounds for fallow fields. For continuous grass or alfalfa, the nitrogen credit is zero pounds per acre.
27. Enter the legume credit from Table 5 on Page C-9 if a legume crop was grown during previous years.
28. For each year, calculate the additional nitrogen that must be applied to the field to meet the crop nitrogen requirements by subtracting the corresponding answers to items #26 and #27 from item #25. To calculate the average additional nitrogen needed, add the nitrogen needs for the three years and divide by three.
29. Calculate the total average nitrogen needed for each field by multiplying the average nitrogen needed in item #28 by the answer in item #21.
30. Calculate the cumulative total nitrogen needed by all the fields by adding the values for each field together.

If the total cumulative nitrogen needs for the fields calculated in item #30 is greater than the total pounds of nitrogen available for the crops calculated in Column 14, the nutrient management plan shows there is adequate land for manure application.

If the total cumulative nitrogen needs for the fields calculated in item #30 is less than the total pounds of nitrogen available for the crops calculated in Column 14, the producer needs to include additional lands in the nutrient management plan.

For actual manure application, the manure application rates must be based on annual soil and manure testing. Annual updates to this plan may result in different application rates. If that is the case, those rates shall be followed for subsequent years.

The Secretary recommends that producers also develop and follow a nutrient management plan for phosphorous. Over-application of phosphorous may lead to water quality problems in area lakes and streams and possibly result in damage to the producer's land and crop.

Submit plan to: Surface Water Quality Program
 Department of Environment and Natural Resources
 523 E. Capitol
 Pierre, SD 57501-3181

Spreadsheet A.) Total Nitrogen Produced From Operation

Animal type	5 Number of animals	6 Avg. wt. (lbs)	7 Lbs. of N per day per animal (Table 1)	8 Total N produced per year = #5 × #7 × 365	9 % N Retained During Handling & Storage (Table 2)	10 Total N Available For Application = #8 × #9	11 % N Retained After Application (Table 3)	12 Total N Retained In Field = #10 × #11	13 3-Year Mineralization Rate (Table 4)	14 Lbs. of N Available for the Crop = #12 × #13
Beef										
Dairy										
Horse										
Poultry										
Sheep										
Other										

Spreadsheet B.) Field Identification Summary

	15	16	17	18	19	20	21	22
	Field ID (Tract and Field)	County	Field Location (1/4 Section, Township, and Range)	Owned (Y) Not Owned (N)	Total Acres of Field	Acres Excluded from Manure Application List areas excluded from land application and setback distance(s) applied	Net Acres Available For Manure Application	Irrigated? Yes (Y) No (N)
a.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
b.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
c.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
d.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
e.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
f.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
g.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
h.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
i.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
j.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
k.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
l.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
m.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
n.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
o.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
p.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
q.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
r.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
s.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
t.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N
u.			___ 1/4, Sec. ___, T ___, R ___	☐ Y, ☐ N				☐ Y, ☐ N

Note: In Column 20, the following letters may be used to indicate the areas in the field to be excluded from the land application of manure: x = well, w = wetland, l = lake, r = river, s = stream, f = farmstead, p = project site, t = shelterbelt, d = dugout

Spreadsheet C.) Crop Information

	23			24			25			26	27			28				29	
	Crop To Be Grown			Yield Goal (bu/acre) or (ton/acre)			N Requirements for Selected Crop (Table 6)			Nitrogen Credits (lbs-N /acre) ¹	Legume Credit (lbs-N/acre) (Table 5)			Additional N Needed for Crop (lbs-N/acre) = (#25 - #26 - #27)				Total N Needed for Each Field = Average From #28 x #21	
	Prior Year	Year		Year		Year		Year			Year								
		1	2	3	1	2	3	1	2		3	1	2	3	Avg ²				
a.																			
b.																			
c.																			
d.																			
e.																			
f.																			
g.																			
h.																			
i.																			
j.																			
k.																			
l.																			
m.																			
n.																			
o.																			
p.																			
q.																			
r.																			
s.																			
t.																			
u.																			
										30	Total Cumulative Nitrogen Needs for Fields Listed ³ = (Sum values entered in Column #29)								

FOOTNOTES:

1. For Column 26, the nitrogen credit is 40 lbs/acre unless the field is fallowed, then the nitrogen credit is 75 lbs/acre. For continuous grass or alfalfa, the nitrogen credit is zero lbs/acre.
2. The average is determined by adding the additional nitrogen needs for the three years and dividing by three.
3. If the total cumulative nitrogen needs for the fields calculated in item #30 is greater than the total pounds of nitrogen available for the crops calculated in column #14, the nutrient management plan shows there is adequate land for manure application. If the total cumulative nitrogen needs for the fields calculated in item #30 is less than the total pounds of nitrogen available for the crops calculated in column #14, the producer needs to include additional lands in the nutrient management plan.

TABLES

TABLE 1: Manure Production in Lbs/Day		
Animal	Size, lbs.	Nitrogen Content, lb/day
Dairy Cattle	150	0.064
	250	0.106
	500	0.213
	1000	0.425
	1400	0.595
Beef Cattle	500	0.17
	750	0.26
	1000	0.34
	1250	0.43
Cow		0.36
Sheep	100	0.042
Poultry		
Layers	4	0.0029
Broilers	2	0.0017
Horse	1000	0.30
Adapted from Table 2-1, Livestock Waste Facilities Handbook - MWPS-18, Second Edition, 1985.		

TABLE 2: Percent Nitrogen Retained During Handling and Storage	
Type of System	Nitrogen Retained, %
Solid	
Daily Scrape and Haul	72
Manure Pack	70
Open Lot	52
Deep Pit (poultry)	62
Litter	62
Liquid	
Anaerobic Pit	78
Above-ground Storage	80
Earth Storage	70
Lagoon	25
Adapted from Table 10-1, Livestock Waste Facilities Handbook - MWPS-18, Second Edition, 1985.	

TABLE 3: Percent of Nitrogen Retained after Application Method	
Land application Method	% of Nitrogen Delivered from Storage to Land by Application Method
a. Injection	98
b. Broadcast	80
c. Broadcast with immediate incorporation	95
d. Sprinkling	72
e. Other - please describe:	Provide percentage with source of information.
Adapted from Table 10-2 from The Livestock Waste Facilities Handbook - MWPS-18, Second Edition, 1985.	

TABLE 4 - Three-Year Mineralization Rates

Manure Type	Manure Handling	Three-Year Mineralization Percent
Beef	solid without bedding	61
	solid with bedding	45
	anaerobic liquid	65
	aerobic liquid	45
Dairy	solid without bedding	61
	solid with bedding	45
	anaerobic liquid	65
	aerobic liquid	45
Sheep	solid	45
Poultry		85
Horses		35

Adapted from Table 10-5 from The Livestock Waste Facilities Handbook - MWPS-18, Second Edition, 1985.

TABLE 5 - First Year Legume Nitrogen Credits

Previous Crop	Crop to be Grown	
	Short Season (small grains, etc) (lbs of N per acre)	Full Season (corn, sunflowers, etc) (lbs of N per acre)
Soybeans *	20	40
Alfalfa (harvested) or sweetclover (unharvested) *	50	100
Sweetclover (harvested) *	10	20
Red Clover (harvested) *	35	70
Edible beans, field peas *	10	20

* Second year Nitrogen credits are half of first year credits.

The source of this information is Extension Circular #EC-750 dated January 1996. The information for soybeans and alfalfa in this table is an average. If the producer wishes to use more detailed information and not the average, please see Extension Circular #EC-750, page 3, for a full listing of legume credits for these two types of crops.

TABLE 6

Nitrogen Requirements for Selected Crops

CROP Corn	YIELD GOAL (bu/acre)	TOTAL NITROGEN (lb/acre-2')	CROP Corn Silage	YIELD GOAL (bu/acre)	TOTAL NITROGEN (lb/acre-2')	CROP Feed Barley	YIELD GOAL (bu/acre)	TOTAL NITROGEN (lb/acre-2')
	60	72		6	62		40	68
	80	96		10	104		50	85
	100	120		14	146		60	102
	120	144		18	187		70	119
	140	168		22	229		80	136
	160	192		26	270		90	153
	180	216					100	170
	200	240						
Oats	(bu/acre)	(lb/acre-2')	Wheat	(bu/acre)	(lb/acre-2')	Rye	(bu/acre)	(lb/acre-2')
	60	78		30	75		30	75
	70	91		40	100		40	100
	80	104		50	125		50	125
	90	117		60	150		60	150
	100	130		70	175		70	175
	110	143		80	200		80	200
Sorghum	(bu/acre)	(lb/acre-2')	Malting Barley	(bu/acre)	(lb/acre-2')	Alfalfa	(ton/acre)	(lb/acre-2')
	40	44		40	60		2	110
	60	66		50	75		4	220
	80	88		60	90		6	330
	100	110		70	105		8	440
	120	132		80	120			
	140	154		90	135			
	160	176		100	150			
Forage Sorghum	(ton/acre)	(lb/acre-2')	Edible Beans	(lb/acre)	(lb/acre-2')	Potatoes	(cwt/acre)	(lb/acre-2')
	3	75		1000	50		200	80
	4	100		1400	70		250	100
	5	125		1800	90		300	120
	6	150		2200	110		350	140
	7	175		2600	130		400	160
	8	200		3000	150		450	180
Sunflowers	(lb/acre)	(lb/acre-2')	Soybean	(bu/acre)	(lb/acre-2')	Safflower	(lb/acre)	(lb/acre-2')
	1000	50		30	115		800	40
	1400	70		40	150		1200	60
	1800	90		50	190		1600	80
	2200	110		60	230		2000	100
	2600	130					2400	120
Buckwheat	(bu/acre)	(lb/acre-2')	Flax	(bu/acre)	(lb/acre-2')	Mustard	(cwt/acre)	(lb/acre-2')
	24	52		20	60		10	65
	32	70		30	90		15	97
	40	88		40	120		20	130
	48	106		50	150		25	162
Millet	(lb/acre)	(lb/acre-2')	Canola	(cwt/acre)	(lb/acre-2')	Rapeseed	(cwt/acre)	(lb/acre-2')
	1000	35		10	65		10	65
	1400	49		15	97		15	97
	1800	63		20	130		20	130
	2200	77		25	162		25	162
	2600	91						
Grass	(ton/acre)	(lb/acre-2')	Sudan Grass	(ton/acre)	(lb/acre-2')	*Total Nitrogen indicates soil nitrogen, legume credits, plus fertilizer (lb/acre-2') = Two foot nitrate soil test (cwt/acre) = Hundred weights / acre SDSU Extension Publication EC750, January 1996, and the SDSU Extension, for Soybean and Alfalfa N Requirements.		
	1	25		3	75			
	2	50		4	100			
	3	75		5	125			
	4	100		6	150			
	5	125		7	175			
	6	150		8	200			
	7	175						

APPENDIX D

25-YEAR, 24-HOUR RAINFALL MAP

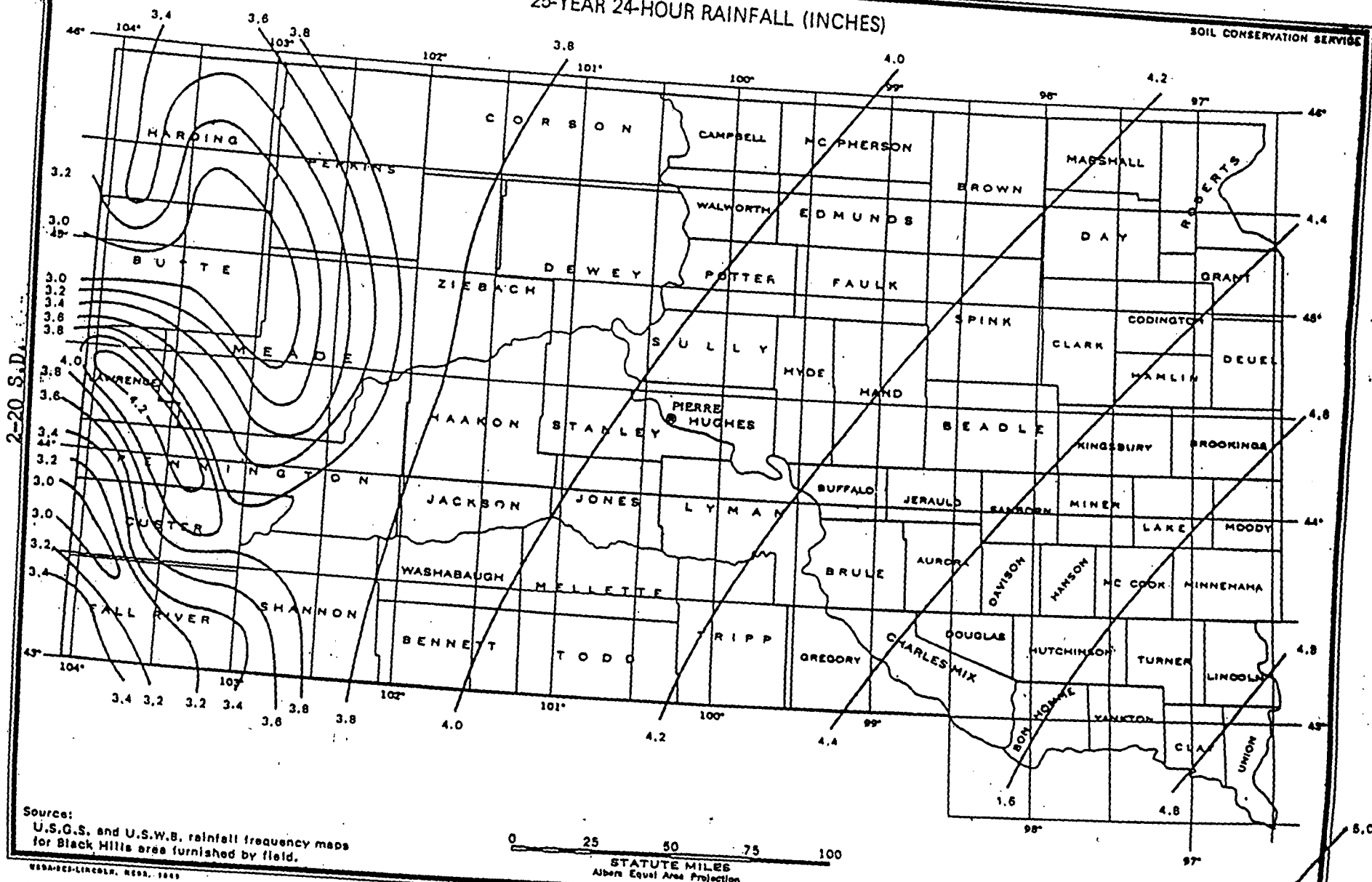
FOR SOUTH DAKOTA

U. S. DEPARTMENT OF AGRICULTURE

SOUTH DAKOTA

25-YEAR 24-HOUR RAINFALL (INCHES)

SOIL CONSERVATION SERVICE

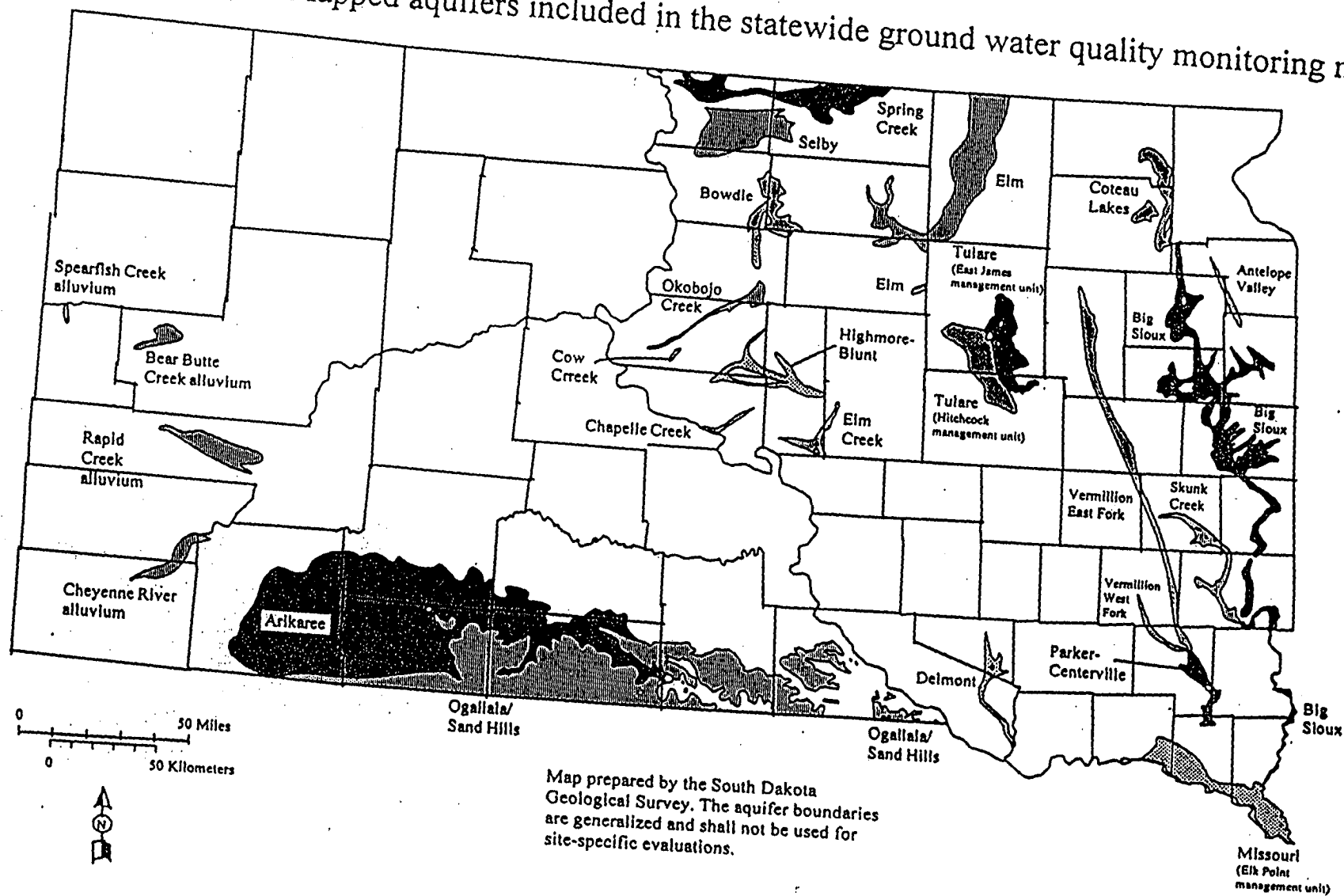


5. L-27, 732-4(6)

APPENDIX E

MAPPED AQUIFERS INCLUDED IN THE STATEWIDE GROUND WATER QUALITY MONITORING NETWORK

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



APPENDIX F

DENR CRITERIA TO DETERMINE GROUND WATER

DISCHARGE AND MONITORING REQUIREMENTS

FOR LIVESTOCK FEEDING OPERATIONS

DENR Criteria to Determine Ground Water Discharge and Monitoring Requirements for Livestock Feeding Operations				
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	
Over 1,000 Animal Units		Under 1,000 Animal Units	Any Size Operation	Any Size Operation
New Feeding Operation (After July 1, 1997): Ground Water Discharge Permit and ground water monitoring required.	Existing or expanding feeding operation: - Ground water monitoring required if operation expands or if a valid water pollution complaint is filed. - Producer has the option of applying for a Ground Water Discharge Permit.	- If the county requires state approval, 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. - 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. - Producer has the option of applying for a ground water discharge permit.	- Operation must comply with local government ordinances. - 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. - 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. - If the operation is outside a wellhead protection area, the producer has the option of applying for a ground water discharge permit.	- Ground Water Discharge Permit not required. - Monitoring may be required if site-specific conditions warrant monitoring to protect localized, shallow ground water supplies.

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 impacted. A valid water pollution complaint is a complaint where violations of ground water quality standards have occurred, or where there is the potential for violations to occur. Shallow aquifer is defined in SDCL 34A-3A-24 passed by the 1997 Legislature.

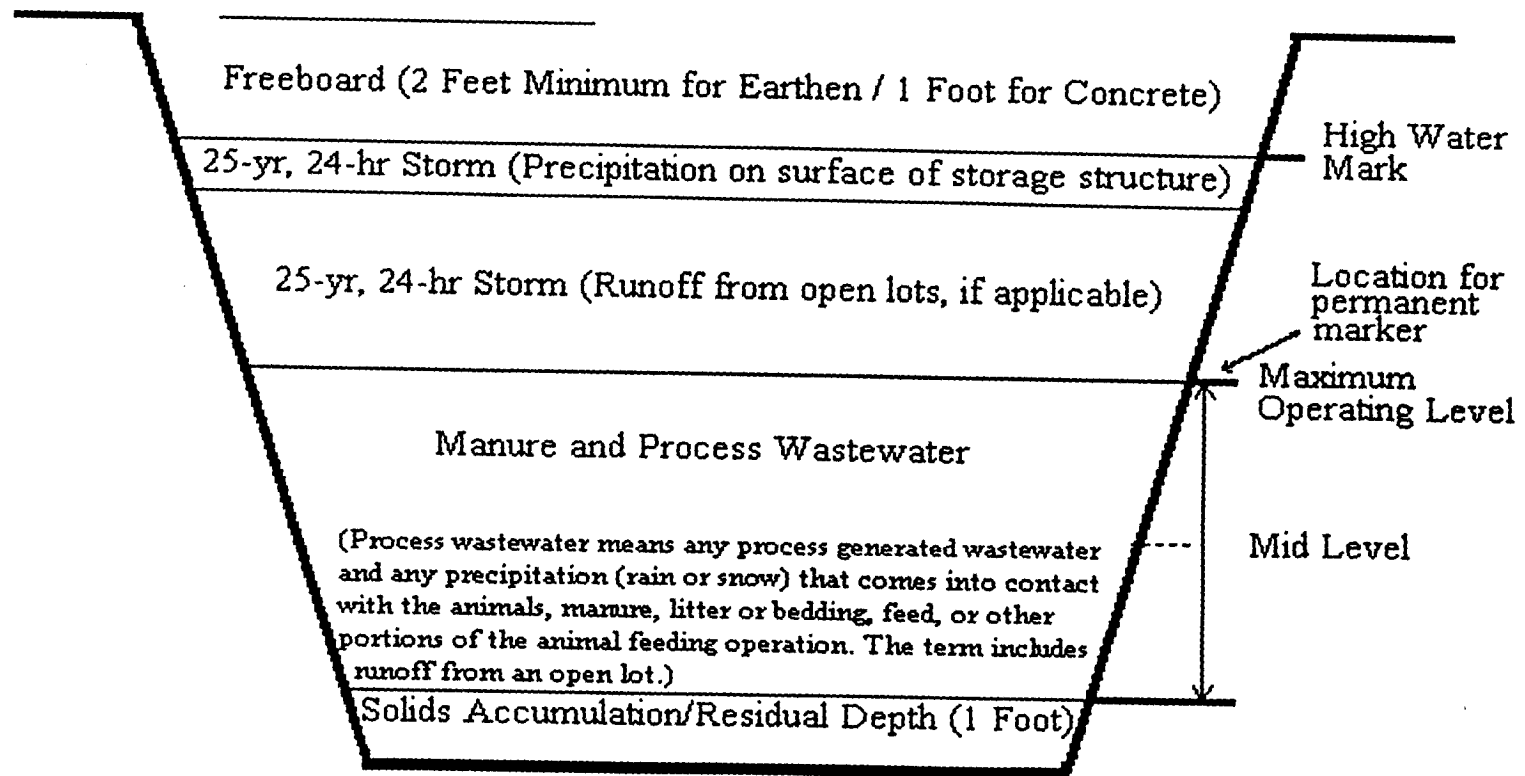
APPENDIX G

CROSS SECTION OF MANURE

STORAGE STRUCTURE

APPENDIX G

CROSS SECTION OF MANURE STORAGE STRUCTURE



STATEMENT OF BASIS

PERMIT TYPE: **General Permit for Concentrated Animal Feeding Operations**

PERMIT NUMBER: **SDG-010000**

Purpose of Statement of Basis

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

Permit Description

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

Background

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

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

Animal feeding operations meet all of these requirements and, therefore, a general permit is appropriate for this source.

Coverage under General Permit

An animal feeding operation is subject to this permit if one or more of the following criteria are met:

1. New or expanding operations that feed or maintain more than 1,000 animal units (see listing below for animal units);
2. A local level of government, such as a county commission or planning and zoning committee, requires coverage; or
3. The Secretary determines coverage is necessary.

The following table contains a comparison of animal units.

Comparison of Number of Animals in Feeding Operation to Animal Units		
Type of Animal Feeding Operation	Number of Animals in Unit	
	300 AU	1,000 AU
Slaughter or Feeder Cattle	300	1,000
Dairy (mature - milked or dry)	200	700
Dairy Heifers	300	1,000
Horses	150	500
Sheep or Lambs	3,000	10,000
Turkeys	16,500	55,000
Chickens (hens or broilers)	9,000	30,000
Ducks	1,500	5,000
Geese	1,500	5,000

To obtain coverage under the permit, the producer shall submit plans and specifications for the manure management system, a nutrient management plan, an operation and maintenance guideline, and a Certification of Applicant Form (see Section III.G. on page 24 of the general permit for signatory requirements). See Appendix A of the general permit for a copy of the Certification of Applicant Form. The plans and specifications must include all components of the manure management system. In accordance with SDCL 34A-2-27, construction of the manure management system cannot proceed until the Secretary approves the plans and specifications.

The plans and specifications, nutrient management plan, and operation and maintenance guideline, and the Certification of Applicant Form shall be submitted to the Secretary at least 60 days prior to anticipated construction. The plans and specifications shall be stamped and signed by a South Dakota-licensed professional engineer. The plans and specifications, nutrient management plan, and operation and maintenance guideline shall include all necessary items to show that the animal feeding operation will comply with the terms and conditions of this permit once constructed. If the Secretary determines that the 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.

Upon receipt of a signed complaint form, the Secretary will determine whether an existing animal feeding operation 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 that inspection, whether an individual discharge permit is required or whether coverage under this permit is required. The Secretary will use the criteria listed in I.B.2.b. on page 6 of the general permit to determine the items that a producer with an existing feeding operation must submit to obtain approval under the general permit. All plans and specifications for manure management systems must be stamped and signed by a South Dakota-licensed professional engineer.

To obtain final coverage under this permit, the producer shall submit to the Secretary the Notice of Completion. If the feeding operation has met the conditions of approval, the Secretary will

issue a Certificate of Compliance, a letter informing the producer of coverage under this permit including the date permit coverage begins, and a copy of the general permit.

Producers that have approved plans and specifications, but do not have a Certificate of Compliance, need only submit the Notice of Completion and Certification of Applicant Form (See Section III.G. of the general permit for signatory requirements). Producers with approved plans and specifications and a Certificate of Compliance must only submit a letter to the Secretary requesting coverage under this general permit along with the Certification of Applicant Form (See Section III.G. for signatory requirements). Upon verification of compliance with the terms and conditions of the plans and specification approval, the Secretary will authorize coverage under the terms and conditions of this permit specifying the date permit coverage begins.

By January 1, 1999, a producer that has obtained coverage under this permit must submit verification that the producer has taken an environmental training course pertaining to proper operation and maintenance of a manure management system and proper natural resource management (See Page 18, item I.D.3.f.). After January 1, 1999, any producer that is required to obtain coverage under this permit must submit this verification before the Secretary will issue a certificate of compliance.

If the Secretary has approved a design prior to the effective date of this permit, the producer can obtain coverage under this permit without modifying the manure management system used at that feeding operation. However, the producer shall be required to submit a nutrient management plan and operation and maintenance guideline if one has not already been approved, and operate the feeding operation in compliance with the terms and conditions of this permit. Should violations occur due to design deficiencies, the Secretary may require modifications to the manure management system, to include additional storage, to ensure compliance with this permit.

The general permit also requires that the Secretary 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.

Effluent Limits

The following effluent limits apply to concentrated animal feeding operations. The limits are based on 40 CFR (Code of Federal Regulations) Part 122 and ARSD Chapter 74:52:02.

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 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 to waters of the state. The only time this permit allows a discharge from an open lot is if a rainfall event, either chronic or catastrophic, 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. Should a discharge occur, the producer shall keep rainfall records to document that a 25-year, 24-hour rainfall event occurred. The producer may use an ordinary rain gauge to determine rainfall amounts.
3. Manure and Wastewater Land application sites. 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 manure or wastewater land application sites. A discharge of manure and process wastewater may occur from these sites only when chronic or catastrophic rainfall events occur. The producer shall keep rainfall records to document that a 25-year, 24-hour rainfall event occurred. The producer may use an ordinary rain gauge to determine rainfall amounts.

Best Management Practices

The producer is responsible for implementing Best Management Practices listed in the general permit to ensure compliance with the terms and conditions of the 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 Plan. The permit describes several Best Management Practices that may assist the producer in complying with the permit and prevent pollution. Best Management Practices are listed for location standards, containment structure design and storage, surface water protection, ground water protection, feedlot manure utilization or disposal by land application, and training and education. Whenever the word "shall" is used, that is a requirement of the permit that the producer must meet or follow.

Nutrient Management Plan

The producer may apply manure for the purpose of growing crops. The producer shall develop, maintain, and follow a nutrient management plan to ensure safe disposal of manure and protection of surface and ground water. The nutrient management plan is a planning document to ensure that the producer has enough land available to safely land apply the manure. Therefore, it is important that the nutrient management plan include the proper mineralization rates for subsequent years of manure application to account for the potential buildup of nitrogen. This will ensure adequate land will be available to the producer for land application of manure. For the actual application of manure, the producer shall also follow the soil and manure testing requirements in Section I.D.5. starting on page 20 of this permit.

The producer should review the nutrient management plan annually, and update it when significant changes to crop production or livestock numbers occur or if soil sampling indicates a buildup of nitrogen in the land application areas. Land that is not included in the department-approved nutrient management plan shall not be used for land application of manure. If the

producer needs to use other land application areas, the producer must submit a list of the new land with the information listed in items h. through k. below. If other land will not be used for manure application that was in the approved nutrient management plan, the producer also needs to identify those. The secretary will review and approve the new list if it ensures there is still adequate land for manure application.

Appendix C of this permit contains a generic nutrient management plan that the producer may use in developing a nutrient management plan. The generic nutrient management plan is based on application of nitrogen. The producer may use other plans provided the alternate plan contains all the information necessary to determine compliance with conditions of this general permit. Nitrogen, in addition to that allowed in the nutrient management plan, may be applied up to the amounts as indicated by soil nitrogen test results that are necessary to obtain the realistic crop yield.

The Secretary recommends and encourages producers to develop nutrient management plans for other nutrients such as phosphorous. Over application of phosphorous may lead to water quality problems in area lakes and streams and result in potential damage to the producer's land and crop.

As an alternative to a nitrogen-based nutrient management plan, producers regulated by this permit may submit a phosphorus-based nutrient management plan to the department for review and approval. However, because nitrogen poses the greatest risk to ground water quality, the phosphorus-based nutrient management plan must include nitrogen soil and manure testing and total nitrogen application rates as well as phosphorous. Regardless of whether the plan is based on nitrogen or phosphorous, the producer shall follow the manure application requirements in section I.D.3.e. starting on page 16 of this permit to minimize the potential for runoff of manure into surface waters. The producer should routinely take soil samples for phosphorous to ensure the phosphorous levels in the soil are not adversely affecting the crop yields.

The Nutrient Management Plan shall contain and address all the items listed in Section I.D.4 starting on page 18 of the general permit.

Soil and Manure Testing

The producer is required to use the procedure described in the general permit to determine the appropriate application rates of manure and process wastewater. The application rate is based upon soil and manure analysis for nitrogen, type of crop, expected crop yields, legume credits, and sampling date. Upon determining this application rate, the producer shall apply the manure and process wastewater according to this calculated rate. Applying manure over the calculated rate is a violation of the general permit. The procedure for calculating the application rate is found in Section I.D.5. starting on page 20 of the general permit.

Inspections

The producer is responsible for conducting the following inspections:

1. **The producer shall inspect the manure management system on at least a weekly basis.** The inspection is to determine if a discharge is occurring, has occurred since the previous inspection, or if a discharge is likely to occur before the next inspection. In addition, the inspection is to determine if proper operation and maintenance procedures are being followed and if Best Management Practices are being implemented. The producer shall keep documentation of each inspection that the Secretary can review upon request or during an inspection.
2. **The producer shall inspect the land application site on a daily basis while land application of wastewater is occurring.** This inspection is to ensure that runoff from the land application site is not occurring. If a discharge is found, the producer is responsible for taking immediate steps to stop the discharge 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.

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 pm central time on Monday through Friday), the producer shall report the discharge by calling (605)773-3231. If possible, the producer shall also take immediate steps to stop the discharge and notify anyone downstream that may be impacted by the discharge.

Standard Permit Conditions

Sections II. and III. of the general permit contain standard conditions that are in all surface water discharge permits that are issued by the Secretary. These conditions are either required by state or federal regulation to be included in all permits issued by the Secretary.

Antidegradation

The effluent limits of this general permit require that there be no discharge of process wastewater to waters of the state. The containment structure must be designed, constructed, and operated to contain all process generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event for the location of the feeding operation. These effluent limits are consistent with the federal EPA standard that is applicable to all regulated feedlots in the United States. The containment structure must be designed to meet the minimum seepage requirements contained in the permit. Other restrictions are in place to ensure proper application rates are used to apply manure and the application is done in an environmentally safe manner. Animal feeding operations regulated under this general permit are required to use certain Best Management Practices for controlling pollution. Therefore, as a result of the "no discharge" requirement and the other permit restrictions, an antidegradation review is not required.

Endangered Species

The general permit prohibits discharges except those provided for under federal law. Discharges are only allowed during chronic or catastrophic rainfall events, therefore, any potential impacts

will be minimized due to the increased flow in the receiving streams. Due to the expected conditions when discharges are allowed, no listed endangered species are expected to be impacted by the issuance of the general permit. DENR has provided copies of this general permit to the U.S. Fish and Wildlife Service.

General Permit Duration

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

Contacts for this permit within the Department of Environment and Natural Resources are Tim Tollefsrud, Kent Woodmansey, or Alan Bakeberg. The telephone number of the department is (605)773-3351.

PARTIES OF RECORD

WATER PERMIT APPLICATION NO. 6041-3, Thompson Farms, Ltd.

APPLICANT

Paul Thompson
Thompson Farms, Ltd.
39313 240th Street
Letcher, SD 57359

PETITIONERS

Scott R. Eisenbeisz, Administrator
Storla Sunset home
24365 393rd Avenue
Letcher, SD 57359

Oscar and Doris Thompson
39210 241st Street
Letcher, SD 57359

Denton Thompson
39722, 243rd Street
Mount Vernon, SD 57363-9605

Norman and Betti Thompson
RR 1 Box 106B
Plankinton, SD 57368

Alvin and Margene Thompson
39141 240th Street
Letcher, SD 57359-5305



February 12, 1998

Water Rights Program
Foss Building
523 East Capitol
Pierre SD 57501

To Whom It May Concern:

Due to the volume of water that is capable of being pumped out of the wells covered by the Application #6044-3 for Thompson Farms, Ltd. for the dairy facility, we ask that protection be given for users of water who pump from nearby chalk or Codell wells. We ask that our adequate domestic wells be protected for not only quantity of water but also quality of water.

Cordially,

Paul Thompson 39210 241st Street, Lethbr 1H57359
Alexis Thompson

cc: Paul Thompson

February 12, 1998



Water Rights Program
Foss Building
523 East Capitol
Pierre SD 57501

To Whom It May Concern:

Due to the volume of water that is capable of being pumped out of the wells covered by the Application #6041-3 for Thompson Farms, Ltd. for the dairy facility, we ask that protection be given for users of water who pump from nearby chalk or Codell wells. We ask that our adequate domestic wells be protected for not only quantity of water but also quality of water.

Cordially,

Norma Thompson
Bette Thompson

cc: Paul Thompson

February 12, 1998



Water Rights Program
Foss Building
523 East Capitol
Pierre SD 57501

To Whom It May Concern:

Due to the volume of water that is capable of being pumped out of the wells covered by the Application #6044-3 for Thompson Farms, Ltd. for the dairy facility, we ask that protection be given for users of water who pump from nearby chalk or Codell wells. We ask that our adequate domestic wells be protected for not only quantity of water but also quality of water.

Cordially,

Alvin Thompson
Margene E Thompson

Alvin and Margene Thompson
39141 240th St.
Letcher, SD 57359-5305

cc: Paul Thompson

February 12, 1998



Water Rights Program
Foss Building
523 East Capitol
Pierre SD 57501

To Whom It May Concern:

Due to the volume of water that is capable of being pumped out of the wells covered by the Application #6041-3 for Thompson Farms, Ltd. for the dairy facility, we ask that protection be given for users of water who pump from nearby chalk or Codell wells. We ask that our adequate domestic wells be protected for not only quantity of water but also quality of water.

Cordially,

Lenton Thompson
39722 243rd St.
Wahpeton SD 57363 9-605

cc: Paul Thompson



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 17, 1998

Mike Cypher
Land O'Lakes, Inc.
26443 461st Avenue
Hartford, SD 57033

Dear Mr. Cypher:

Enclosed are petitions filed in response to the notice of hearing on Water Right Permit Application No. 6041-3, Thompsons Farms.

Sincerely,

Eric Gronlund
Water Rights Program
(605) 773-3352



Storla Sunset Home

24365 393RD AVE

LETCHER, SD 57359

PHONE: (605) 248-2244

FAX: (605) 248-2247

sshheart@santel.net



Memorandum

TO: Water Rights Program
Thompson Farm
FROM: Storla Sunset Home
DATE: February 13, 1998
RE: Water Permit # 6041-3

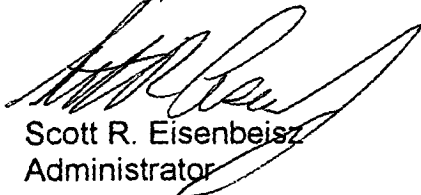
To Whom It May Concern:

I am writing regarding the water permit #6041-3 at the Thompson's farm located in Aurora County.

Storla Sunset Home is in the Codell aquifer which is referred to in the permit as 3 miles south of the Thompson's farm. Storla Sunset Home wants to protect our adequate well water. The quantity and quality of water is very important to a nursing home. In the permit for the Thompson's farm, it states that only the quantity of water will be maintained. Storla Sunset Home would like the permit to include both the **quantity** and **quality** of water.

Thank you for taking the time to listen to Storla Sunset Home, your attention and solution to this concern would be greatly appreciated. If you have any questions or concerns, please feel free to contact Storla Sunset Home.

Sincerely,



Scott R. Eisenbeisz
Administrator



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

MEMORANDUM

TO: Eric Gronlund, Natural Resources Engineer
Water Rights Program

FROM: Kelli Buscher, Natural Resources Engineer
Surface Water Quality Program

DATE: March 20, 1998 *Kelli Buscher*

SUBJECT: SoDak Dairy/Thompson Farms

On August 28, 1997, we approved the plans and specifications for SoDak Dairy (also known as Thompson Farms). The plans for their manure management system were approved before the general permit for concentrated animal feeding operations was issued. As a condition to their water right permit, Thompson Farms was required to obtain coverage under the general permit. You asked me to provide you with information on how Thompson Farms could get coverage under this general permit.

Once construction of the manure management system is complete, their engineer must submit a Notice of Completion to the department. This notice verifies that the system was built according to the plans and specifications we approved. Thompson Farms must also submit a Certification of Applicant form, along with a request for coverage under the general permit. I have attached a copy of the general permit and marked these forms. Upon verification of compliance with the terms and conditions of the plans and specifications approval, we will send Thompson Farms a letter granting coverage under the general permit and issue them a Certificate of Compliance.

We can grant coverage under the general permit for operations that have previously approved plans and specifications without requiring modifications to the manure management system. However, the producer is required to operate the feeding operation in compliance with the terms and conditions of the general permit. Should violations occur due to design deficiencies, we may require modifications to the manure management system to ensure compliance with the general permit.

Let me know if you have any questions.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

MAR 24 1998

Paul Thompson
Thompson Farms
39313 240th Street
Letcher, SD 57359

Dear Mr. Thompson:

Enclosed is Water Permit No. 6041-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Water Permit No. 6041-3 was issued with a qualification that "Permit No. 6041-3 is subject to compliance with requirements of the General Water Pollution Control Permit for concentrated animal feeding operations." However, the plans and specification for the facility were approved prior to the inception of the General Permit. I consulted with Kelli Buscher of the Surface Water Program in order to provide guidance on the steps necessary for the facility to meet the requirements of the general permit for a concentrated feed operation.

Once construction of the manure management system is complete, your engineer must submit a Notice of Completion to the department. This notice verifies that the system was built according to the plans and specifications. Also to receive coverage under the general livestock permit, you will need to submit a Certification of Applicant form. I have attached a copy of the general permit and marked these forms. Upon verification of compliance with the terms and conditions of the plans and specifications approval, you will be sent a letter granting coverage under the general permit and a Certificate of Compliance will be issued. You will be required to operate the facility in compliance with the terms and conditions of the general permit. If you or your engineer have any questions on the general permit for concentrated feeding operations, please contact Kelli Buscher, of the Surface Water Program at (605) 773-3351.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.

6041-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

September 3, 2010

6041-3
6041A-3

Rick Kjolsing
AgStar Financial Services
1921 Premier Dr
Mankato MN 56002

Dear Mr. Kjolsing:

I am writing in follow up to our phone conversation of September 2nd concerning Water Permit Nos. 6041-3 (Thompson Farms) and 6041A-3 (AgStar Financial Services).

The project was inspected for licensing purposes in the summer of 2008. The only thing that needs to be done prior to the license being issued is to update the ownership. Once both permits are transferred, they will be incorporated into one license.

Enclosed are partially completed Notice of Transfer of Ownership forms for filing the ownership changes. They will need to be completed; signed by the new owner (or a representative) and returned to our office with a required filing fee of \$50.00 each **(total of \$100)**. The check or money order for the fee can be made payable to the Water Rights Program. I am enclosing a postage paid envelope for use in returning the completed forms and fee to our office.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosure



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

September 2, 2009

N6. 6041-3
6041A-3

Rick Kjolsing
1921 Premier Dr.
Mankato MN 56002

Dear Mr. Kjolsing:

Enclosed are partially completed "Notice of Transfer" forms for filing an ownership change on Water Permit Nos. 6041-3 and 6041A-3. These permits authorize two wells for a commercial dairy facility located in the NW ¼ Section 13-T105N-R63W, Aurora County. The water permits are currently listed in the name of Thompson Farms Ltd and AgStar Financial Services.

The transfer forms should be completed, checked over for accuracy and **signed by the current owner**. Upon completion, return the forms to our office with a required filing fee of \$50.00 each (\$100.00 total).

South Dakota Water Law 46-5-30.3 requires Notice of any sale, grant, lease, conveyance or other transfer of a water permit or water right to appropriate water to be filed with this office within ninety days.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
email: karen.schlaak@state.sd.us

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

September 9, 2011

6041-3
6041A-3

Rick Kjolsing
AgStar Financial Services
1921 Premier Dr
Mankato MN 56002

Dear Mr. Kjolsing:

I am writing in regard to Water Permit Nos. 6041-3 (Thompson Farms) and 6041A-3 (AgStar Financial Services). On September 3, 2010, I forwarded transfer forms to you for changing ownership of the water permits. To date, we have not received anything back from you.

The project was inspected for licensing purposes in the summer of 2008. The only thing that needs to be done prior to the license being issued is to update the ownership. Once both permits are transferred, they will be incorporated into one license.

Enclosed are partially completed Notice of Transfer of Ownership forms for filing the ownership changes. They will need to be completed; signed by the new owner (or a representative) and returned to our office with a required filing fee of \$50.00 each **(total of \$100)**. The check or money order for the fee can be made payable to the Water Rights Program. I am enclosing a postage paid envelope for use in returning the completed forms and fee to our office.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads 'Genny McMath'. The signature is written in a cursive, flowing style.

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosures

RECEIVED

MAY 04 2012

WATER RIGHTS
PROGRAM

NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

No. 6041-3

Date:

4-12-12

I/We request that Water Permit No. 6041-3

formerly owned by: Thompson Farms Ltd

be transferred to: (name & address) Calvin Berwald, 24050 393rd Avenue, Letcher, SD 57359

Telephone No. (605) 690-8099

Title to the following described land(s)/property has been transferred as described above:

Wells located in the SW ¼ NW ¼ Section 13, T105N, R63W

I/We understand that the validity of Water Permit No. 6041-3 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Calvin Berwald

the new owner, certify that the above information is true and correct.



(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/4, 20 12

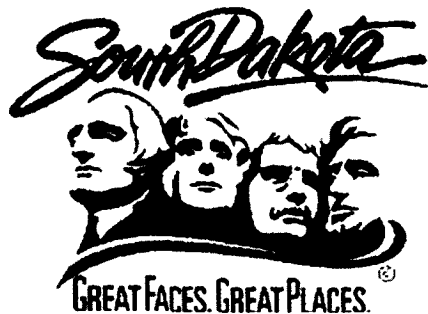
RECEIVED OF Woods Fuller Schultz & Smith P C PO Box 5027 Sioux Falls SD 57117

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form <u>6041-3</u>		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	50 00

No. 05434

By Harold Erbe
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
denr.sd.gov

JUN 20 2012

6041-3
6041A-3

Calvin Berwald
24050 393rd Ave
Letcher SD 57359

Dear Mr. Berwald:

The transfer of ownership for Water Permit Nos. 6041-3 and 6041A-3 has been completed. The permits formerly listed in the names of Thompson Farms Ltd and AgStar Financial Services are now listed in your name. Once the transfers were completed, the permits were licensed and incorporated together. The receipts for the transfer and licensing fees will be directed to Woods, Fuller, Shultz & Smith PC.

Enclosed is Water License No. 6041A-3. This is the final water right document completing the process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the wells authorized by Water Right No. 6041A-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Garland Erbele".

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

c: Woods, Fuller, Shultz & Smith PC w/Receipt Nos. 05432, 05433 and 05434