

WATER PERMIT NO. 7955-3

Name of Applicant: Karl M Schenk

Address: 44352 308th St, Mission Hill SD 57046

Phone: 605 760-0363

Amount of Water Claimed: 1.78 cfs

Total Acres: 140 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 8 miles southeast of Yankton

PRIORITY

Date Received: 2-3-14

Application/License Fee: \$1050

Corrected Application Received:

Period of Annual Use: April 1 – October 31

Remarks:

Diversion Point: center SE 1/4 Sec 27-T93N-
R54W

Land to be Irrigated: SE 1/4 Sec 27-T93N-R54W

Depth of Well: 90 feet deep

Well Driller:

Remarks:

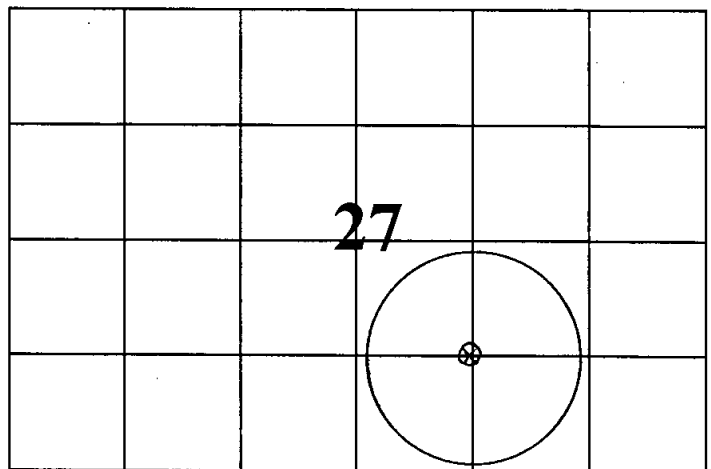
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-3-14

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota
(Type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7955-3</u> (office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Vermillion River</u>
	Newspaper <u>Press & Journal</u> <u>319 Walnut</u>
	<u>Yankton 57078</u> <u>605-665-7811</u>

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Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Karl M Schenk
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent
(name and complete address if different than above name)
- Mailing Address 44352 308th St Mission Hill SD 57046
(Address) (City) (State) (Zip Code)
- Home Phone _____ Cell 605 760 0363 Email KnSchenk@comcast.net
2. Amount of water claimed 1.78*CFS or 800**GPM ***AF Total Acreage 140
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply 1 well Lower James / Missouri Aquifer?
4. Location of point of diversion center of SE 1/4 S.27 93-54
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
- County Yankton
5. County or counties where water will be used Yankton
6. Annual period during which water is to be used April thru October
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NW 1/4 SE 1/4	35	Allen Sec 27-T93N-R54W	
SW 1/4 SE 1/4	35		
SE 1/4 SE 1/4	35		
NE 1/4 SE 1/4	35		

8. Give a description of the project. (Attach sheet if more space is needed)

1 electric or diesel engine driven turbine pump approx. 40-50 hp. water tube shaft. 130.0' Renke center pivot w/ booster pump.

I, Karl Schenk, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7955-3

Date of first receipt of application February 3, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7955-3 to Karl M Schenk, 44352 308th St, Mission Hill SD 57046 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. 7955-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (90 feet deep) located in the center of the SE 1/4 Section 27 for irrigation of 140 acres located in the SE 1/4 Section 27; all in T93N-R54W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is February 3, 2014.
4. The date of approval of Permit No. 7955-3 is April 14, 2014.
5. One-fifth of the construction is to be completed on or before October 14, 2016.
6. All construction is to be completed on or before April 14, 2019.
7. Water is to be put to beneficial use on or before April 14, 2023.
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. The well approved under Water Permit No. 7955-3 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.
2. The new well authorized by Permit No. 7955-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump 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.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: 

Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAY 02 2014

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 22" Depth 97-100'
- b) Casing Type PVC Diameter 16 Thickness 1/2"
- c) Screen Type PVC Diameter 16 Thickness 1/2"
- d) Gravel Pack 1/8-3/8 pea rock Length of Gravel Pack 45'
- e) Depth to Top of Water Bearing Material 65'
- f) Depth to Water (ground surface to water level) 20'
- g) Distance to nearest existing domestic well:

On applicant's property none

On property owned by others maybe a well
straight south
of center point
1000 to 1300' away

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 (e.g. 3 to 1 is a typical slope)

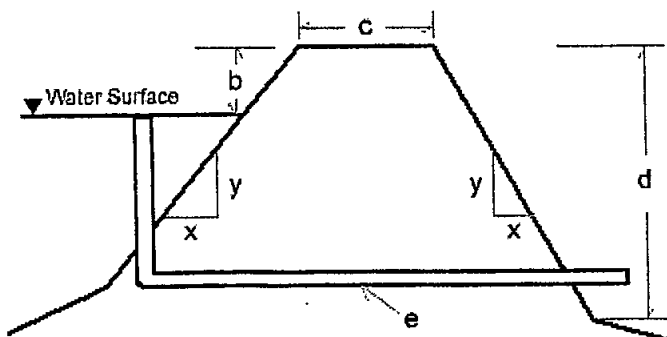
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable)

☒ Drilling new well(s)

☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

c) Well Depth 90-100' Depth to Top of Water Bearing Material 40-50' Depth to Water from Surface ≈ 20'

d) Distance to nearest existing domestic well:

On applicant's property none

On property owned by others 1300' ≈

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

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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.

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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 (e.g. 3 to 1 is a typical slope)

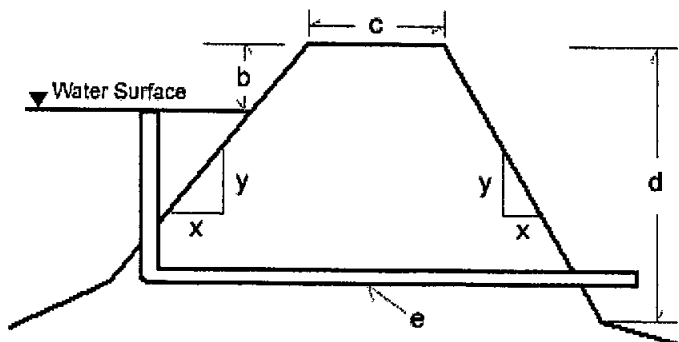
Upstream _____

Downstream _____

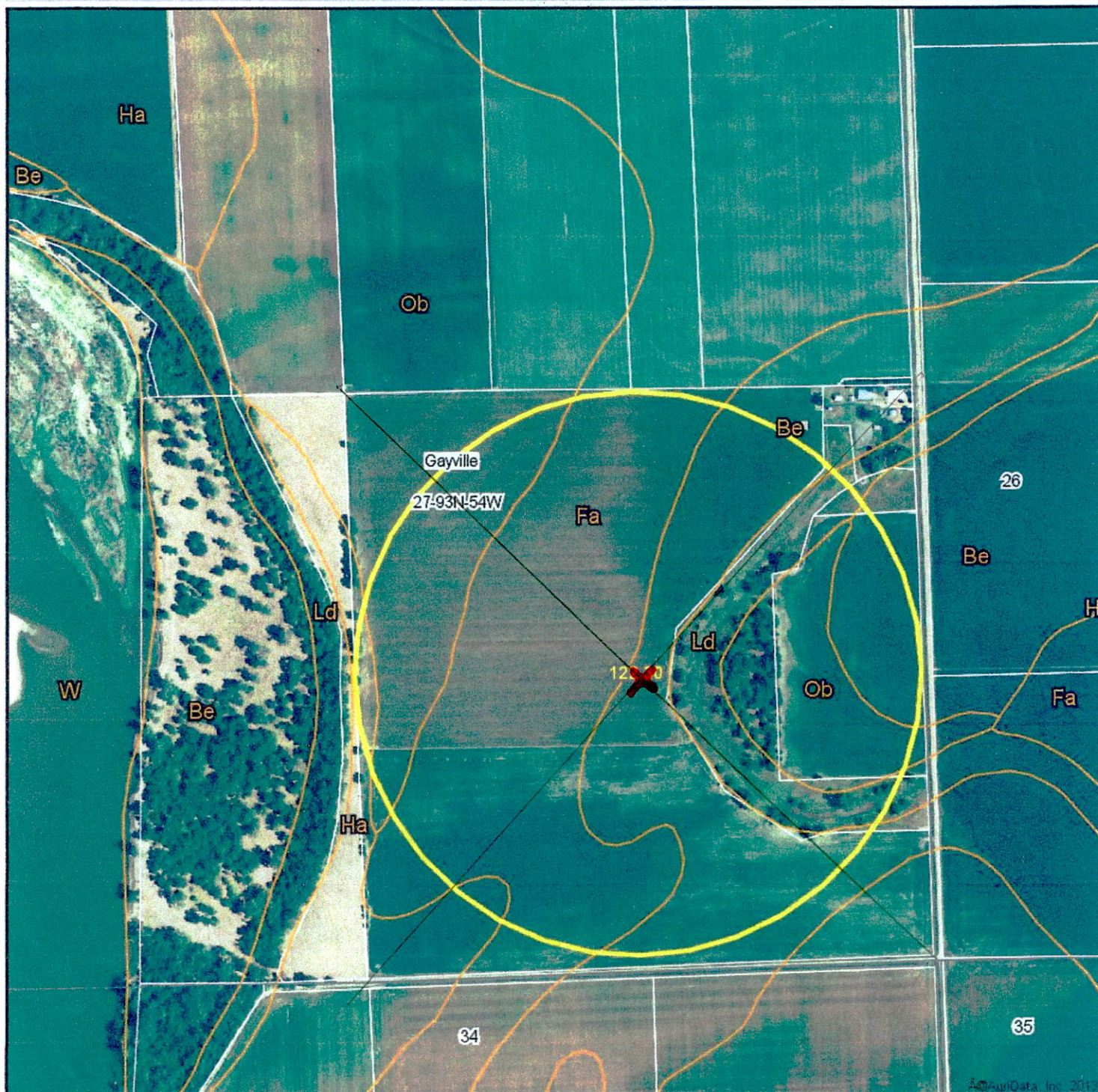
h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Aerial Map



"X" = point of diversion

The "X" is the center of the field.

Maps provided by:



surety
CUSTOMIZED ONLINE MAPPING

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www.AgriDataInc.com

Vicki Swensen
Yankton
County FSA
1-31-2014

27-93N-54W
Yankton County
South Dakota

map center: 42° 50' 33.68, 97° 12' 23.63

scale: 8742

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10/31/2013

Field borders provided by Farm Service Agency as of 5/21/2008. Aerial photography provided by Aerial Photography Field Office.



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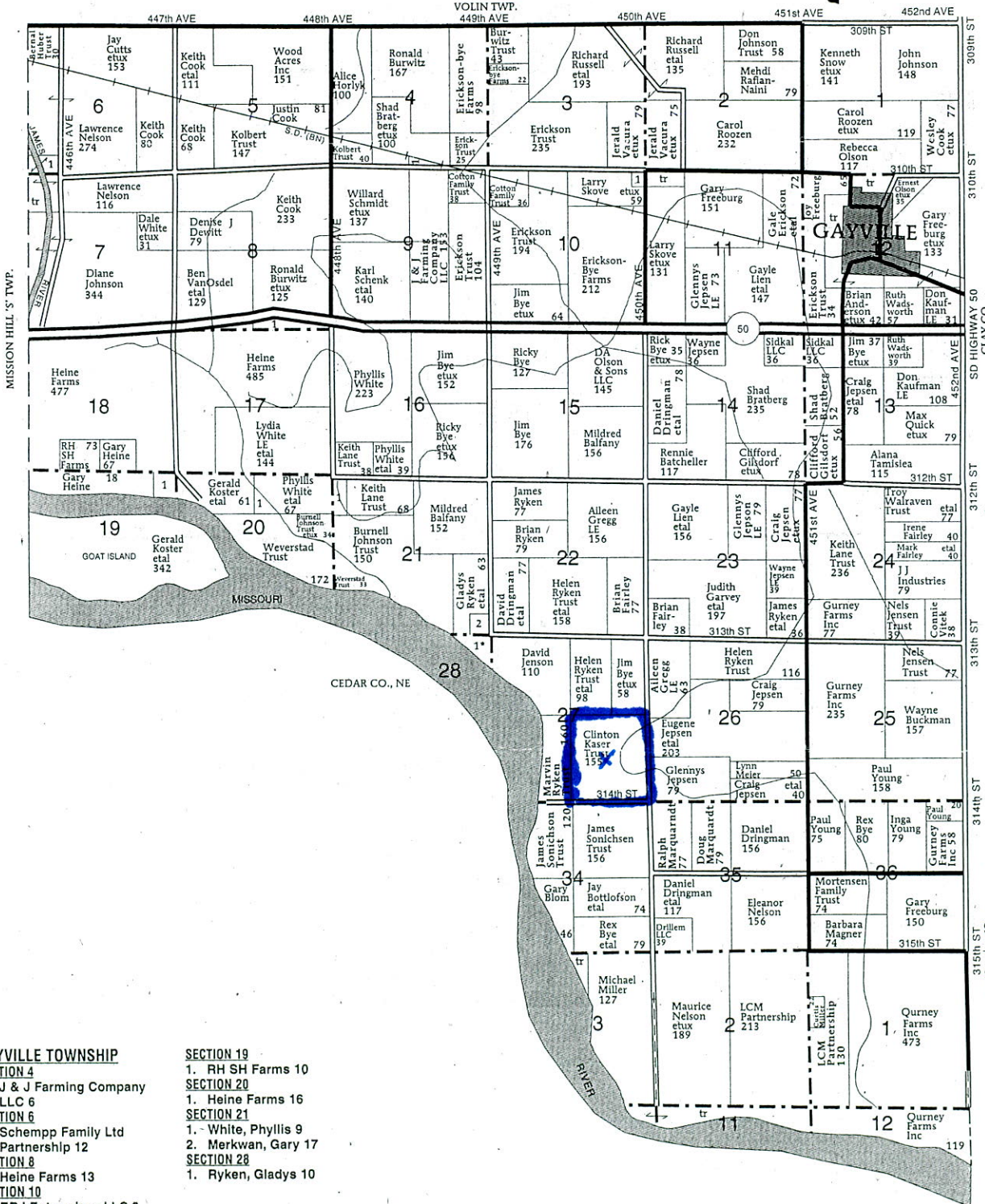
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T-92-93-N

GAYVILLE PLAT

R-54-W



GAYVILLE TOWNSHIP

- SECTION 4**
1. J & J Farming Company LLC 6
SECTION 6
1. Schempp Family Ltd Partnership 12
SECTION 8
1. Heine Farms 13
SECTION 10
1. RRJ Enterprises LLC 9

SECTION 19

1. RH SH Farms 10
SECTION 20
1. Heine Farms 16
SECTION 21
1. White, Phyllis 9
2. Merkwan, Gary 17
SECTION 28
1. Ryken, Gladys 10

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/3, 20 14

RECEIVED OF Karl M Schenk 946 Wynstone Dr Jefferson SD 57038

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

Fee for Application for Permit No. <u>7955-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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. <u>7955-3</u>	200	00
Fee for Filing Transfer Form _____		
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	1050 00

No. **06724**

By 
Chief Engineer



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7955-3, Karl M Schenk**

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. 7955-3, Karl Schenk, 44352 308th Street, Mission Hill SD 57046

The Chief Engineer is recommending APPROVAL of Application No. 7955-3 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. The well approved under Water Permit No. 7955-3 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.
2. The new well authorized by Permit No. 7955-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump 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.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
March 26, 2014

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7955-3
KARL M SCHENK
MARCH 26, 2014

Water Permit Application No. 7955-3 proposes to divert groundwater at a maximum rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the Elk Point management unit of the Missouri aquifer. The well is expected to be approximately 90 feet deep and located in the approximate center of the SE ¼ Section 27 for the irrigation of 140 acres located in the SE ¼ Section 27; all in T93N-R54W in Yankton County.

AQUIFER: Elk Point management unit of the Missouri aquifer (M:EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Elk Point management unit of the Missouri aquifer is an alluvium mantled outwash consisting of fine sand to very coarse gravel (Niehus, 1994; Stephens, 1967). The Missouri: Elk Point aquifer is located in southeastern South Dakota, underlying large portions of Yankton, Clay, and Union Counties. In total, the Missouri: Elk Point aquifer is estimated to underlie 210,100 acres and contain 3,287,100 acre feet (ac-ft) of recoverable water in storage (Hedges et. al, 1982). The aquifer connects to the Lower Vermillion Missouri and Lower James Missouri aquifers to the north, overlies and is often hydrologically connected to the Dakota aquifer, and is hydraulically connected to the Vermillion, Big Sioux, and Missouri Rivers. Water in the aquifer generally moves from the northwest to the southeast and towards the Missouri River (Stephens, 1967). The Missouri: Elk Point aquifer is predominantly under water table conditions.

A test well log was not submitted with this application. A nearby SD DENR-Geological Survey test hole log indicates sand and gravel from ground surface to 128 feet below grade (SDGS, 2014). The static water level of wells in the area and a DENR-Water Rights Program observation well (YA-80KA) ranges from 15 to 23 feet below ground surface (Water Rights, 2014a and 2014c). The well site is approximately 2,300 feet away from the Missouri River.

South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

This application proposes to appropriate water from the Missouri: Elk Point aquifer. Actual water use, if this application is approved, will likely be less than 280 acre-feet annually (ac-ft/yr). The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable the quantity of

water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.” If the source of the water is older or lower than the greenhorn formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved and the aquifer is not older or lower than the Greenhorn Formation therefore withdrawal/recharge issue must be considered.

Hydrologic Budget:

The hydrologic budget of the Missouri: Elk Point aquifer was evaluated for groundwater appropriations as of June 10, 2013. Water rights/permits/future use permits are expected to use 81,108 ac-ft/yr, which includes expected use of new irrigation water permits. Recharge to the aquifer is estimated to be at least 91,964 ac-ft/yr, which considers induced recharge. Therefore, approximately 10,856 ac-ft/yr of unappropriated water was available at that stage of development (Stonesifer, in progress).

Since June 10, 2013, eight water permits have been approved and three are pending, Application Nos. 7938-3, 7941-3, and 7951-3. The eight water permits and three pending permits are for irrigation use and are shown in Table 1. Historically, irrigation use water rights/permits withdrawing water from this aquifer pump on average 13.7% of the total appropriation (Stonesifer, in progress). Applying this proportion to the new appropriations and the pending appropriation, estimated expected use is 360 ac-ft/yr. Consequently, there is approximately 10,496 ac-ft/yr of recharge in excess of average annual withdrawal. Therefore there is a reasonable probability that unappropriated water is available for this proposed appropriation.

Permit No.	Name	County	Priority Date	Permit CFS	Permit Acres	Permit Appropriation (ac-ft)
7848-3	Missouri Valley Farms Inc.	Union	05/31/2013	3.04	213	426
7856-3	Mike & Steve Allard	Union	07/01/2013	1.78	129.3	258.6
7895-3	Todd Hansen	Union	09/09/2013	1.89	180	360
7898-3	James Orr	Clay	09/12/2013	1.56	132	264
7899-3	Justin Orr	Clay	09/12/2013	1.56	97	194
7904-3	Craig S. McInerney	Union	09/23/2013	1.78	160	320
7933-3	Doug Bye	Clay	12/12/2013	0.89	80	160
7936-3	Donald Johnson	Yankton	12/17/2013	1.39	83	166
7938-3	Russell M. Hall	Union	Pending	n/a	53	106
7941-3	Joseph F. Chicoine	Union	Pending	1	37.69	75.8
7951-3	Allen Pace	Union	Pending	1.78	150	300

Table 1- Approved and pending water permits from the Missouri Elk: Point aquifer since June 10, 2013 (Water Rights, 2014b)

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the [Water Management Board] shall rely upon the record of observation well measurements... to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The Water Rights Program monitors 38 observation wells completed into the Missouri: Elk Point aquifer (Water Rights, 2014a). The nearest of these wells, YA-80KA, is located approximately 1.3 miles southeast of the proposed well site. The hydrograph of this observation well is shown in Figure 1. The observation well data documents cyclic conditions of water levels, recharging

during wet years and declining during dry years. The hydrograph also shows the effects or lack thereof of nearby pumping on the aquifer. Observation well data indicates that at the current level of development temporal well withdrawal is greatly masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal.

In general, hydrographs of observation wells completed into the Missouri: Elk Point aquifer show a slight decline of the water table. This has been attributed to entrenching of the Missouri River and a strong hydraulic connection between the river and the aquifer (Goodman, 2007; Stephens, 1967). The Missouri River stage near the City of Yankton has decreased approximately ten feet since the Gavin's Point Dam was completed, as shown in Figure 2. Since the drought in 2012, water levels in many observation wells completed into the Missouri: Elk Point aquifer have not yet returned to previous elevations. Also shown in the hydrograph is Missouri River water levels near the City of Yankton, approximately 12 miles west of the observation well. The trends in water levels between groundwater and surface water are very similar. This indicates that a strong hydraulic connection exists, where groundwater levels are to some extent dependent on the Missouri River stage. Therefore, water levels in the aquifer are not decreasing due to well withdrawal, and unappropriated water is available.

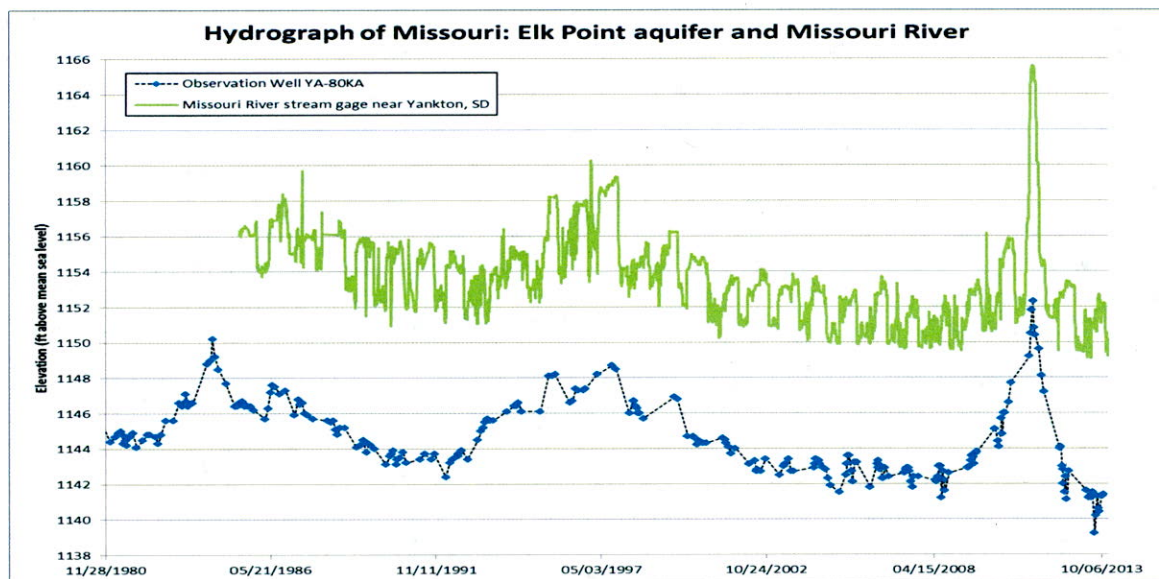


Figure 1- Hydrograph for observation well YA-80KA and Missouri River stream gage near the City of Yankton (USGS, 2014; Water Rights, 2014a)

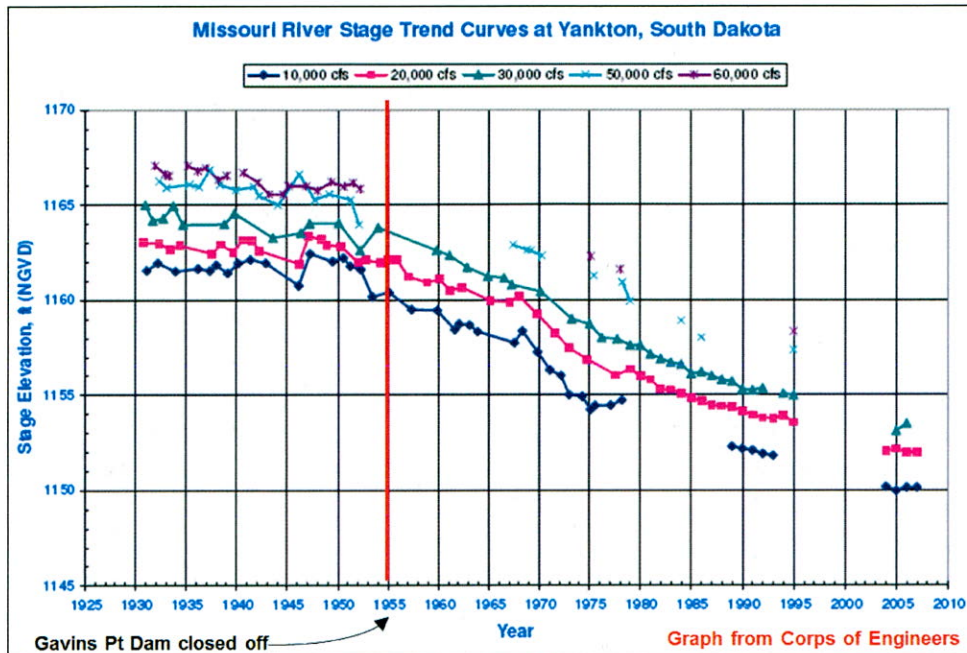


Figure 2- Missouri River Stage Trend Curves at Yankton, South Dakota (Cowman, 2014)

EXISTING WATER RIGHTS:

There are six water rights/permits authorizing wells completed into the Missouri: Elk Point aquifer within approximately one mile of the proposed well site (Water Rights, 2014b). The nearest well authorized by a water right/permit is approximately one-half mile north of the proposed well site. There are two domestic wells on file with the SD DENR-Water Rights program within approximately one mile of the proposed well site (Water Rights, 2014c). The nearest domestic well on file is approximately 0.3 miles northeast of the proposed well site.

The relatively large saturated thickness, the areal extent, and the water table conditions of the Missouri: Elk Point aquifer indicates the effects of drawdown due to pumpage would be minimal. However, precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. Therefore, nearby adequate wells defined by ARSD 74:02:20(7) are not expected to be adversely or unlawfully impaired due to the proposed wells.

CONCLUSIONS:

1. The water permit application proposes to withdraw groundwater at a maximum diversion rate of 1.78 cfs from one well to be completed into the Missouri: Elk Point aquifer for the irrigation of 140 acres in Yankton County.
2. Unappropriated water is available from the Missouri: Elk Point aquifer to supply the proposed appropriation.
3. This proposed diversion is not expected to adversely or unlawfully impair existing appropriative or domestic users.



Adam Mathiowetz
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

Cowman, Tim. 2014. "Bed Degradation." Message to Ken Buhler. 20 February, 2014. E-mail.

Goodman, J.A. 2007. Report on Water Permit Application No. 6869-3 for Lewis and Clark
RWS: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

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Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of
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SDGS. Lithologic Logs Database Search. <<http://sddenr.net/lithdb/>>. Accessed: 19 March, 2014.
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Stonesifer, J.R. in progress. Water Availability of the Missouri: Elk Point Aquifer. SD DENR-
Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

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USGS 06467500 Missouri River at Yankton, South Dakota.

Water Rights. 2014a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg.,
Pierre, South Dakota.

Water Rights. 2014b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss
Bldg., Pierre, South Dakota.

Water Rights. 2014c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe
Foss Bldg., Pierre, South Dakota.

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YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
Joe Foss Building
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Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No 7955-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 2nd DAY OF April 2014
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$25.49 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 4/2/2014

FILED ON: 4/2/2014

SUBSCRIBED AND SWORN TO BEFORE ME THIS 2nd DAY OF April 2014

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

Notice is given that Karl M Schenk, 44352 308th St, Mission Hill SD 57046 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri/Elk Point Aquifer (90 feet deep) located in the center of the SE 1/4 Section 27 for irrigation of 140 acres located in the SE 1/4 Section 27; all in T93N-R54W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7955-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting 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 April 14, 2014.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$25.49.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



March 27, 2014

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7955-3 to Appropriate Water. Please publish the notice once on April 2, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Karl M Schenk, 44352 308th St, Mission Hill SD 57046 (Ph # 605-760-0363).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



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

March 27, 2014

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Water Permit Application No. 7955-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also 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.

Instruction to Newspaper - Publish the Notice on April 2, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7955-3 to Appropriate Water

Notice is given that Karl M Schenk, 44352 308th St, Mission Hill SD 57046 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (90 feet deep) located in the center of the SE 1/4 Section 27 for irrigation of 140 acres located in the SE 1/4 Section 27; all in T93N-R54W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7955-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting 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 April 14, 2014.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of_____.



DEPARTMENT OF ENVIRONMENT
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MAY 02 2014

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Enclosed is temporary use Water Permit No. 7955-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7955-3**

I have this day, August 12, 2021 made a thorough examination of the water use system owned by Karl M. Schenk, 44352 308th St., Mission Hill, SD 57046, holder of Permit No. 7955-3, bearing the priority of February 3, 2014 authorizing the diversion of 1.78 cu. ft. per second of the waters of groundwater (Missouri: Elk Point Aquifer) for the irrigation of 140 acres located in Yankton County.

Inspection contact: Karl Schenk

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Sam Heine Well Company, LLC
- 2) No. of Wells: 1
- 3) Depth(s): 140 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 40 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 16 inches
- 2) Length: 100 feet
- 3) Type: PVC
- 4) Static water level: 20 feet

Pump:

- 1) Make: Preferred Pump
- 2) Model: 12MS
- 3) Capacity: 1,000 gpm

Motor:

- 1) Make: General Electric
- 2) Model No.: 5KE364DTT6019A
- 3) Horsepower rating: 60 hp

B. Works used to transport water to place of use:

- 1) Type: Steel
- 2) Size: 8 inches
- 3) Length: 20 feet

C. Works used to apply water to beneficial use:**Center Pivot:**

- 1) Make: Reinke
- 2) Overall length: 1,288 feet
- 3) Number of towers: 8
- 4) End gun: Yes
- 5) Capacity: 1,000 gpm

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
- 3) Exceptions to compliance are: The pump flow rate is more that what was permitted.

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
The well is 1,350 feet west and 1,310 feet north of the southeast corner of Section 27-T93N-R54W (Latitude 42.841060, Longitude -97.205150 – SW1/4 of the SE1/4).
- 2) The works are capable of diverting and conveying to the place of use 2.22 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in the Section 27-T93N-R54W:

<u>NW1/4SE1/4</u>	<u>33 acres</u>
<u>NE1/4SE1/4</u>	<u>34 acres</u>
<u>SW1/4SE1/4</u>	<u>34 acres</u>
<u>SE1/4SE1/4</u>	<u>33 acres</u>

comprising a total of 134 acres of land and the license should be issued for 1.78 cfs.

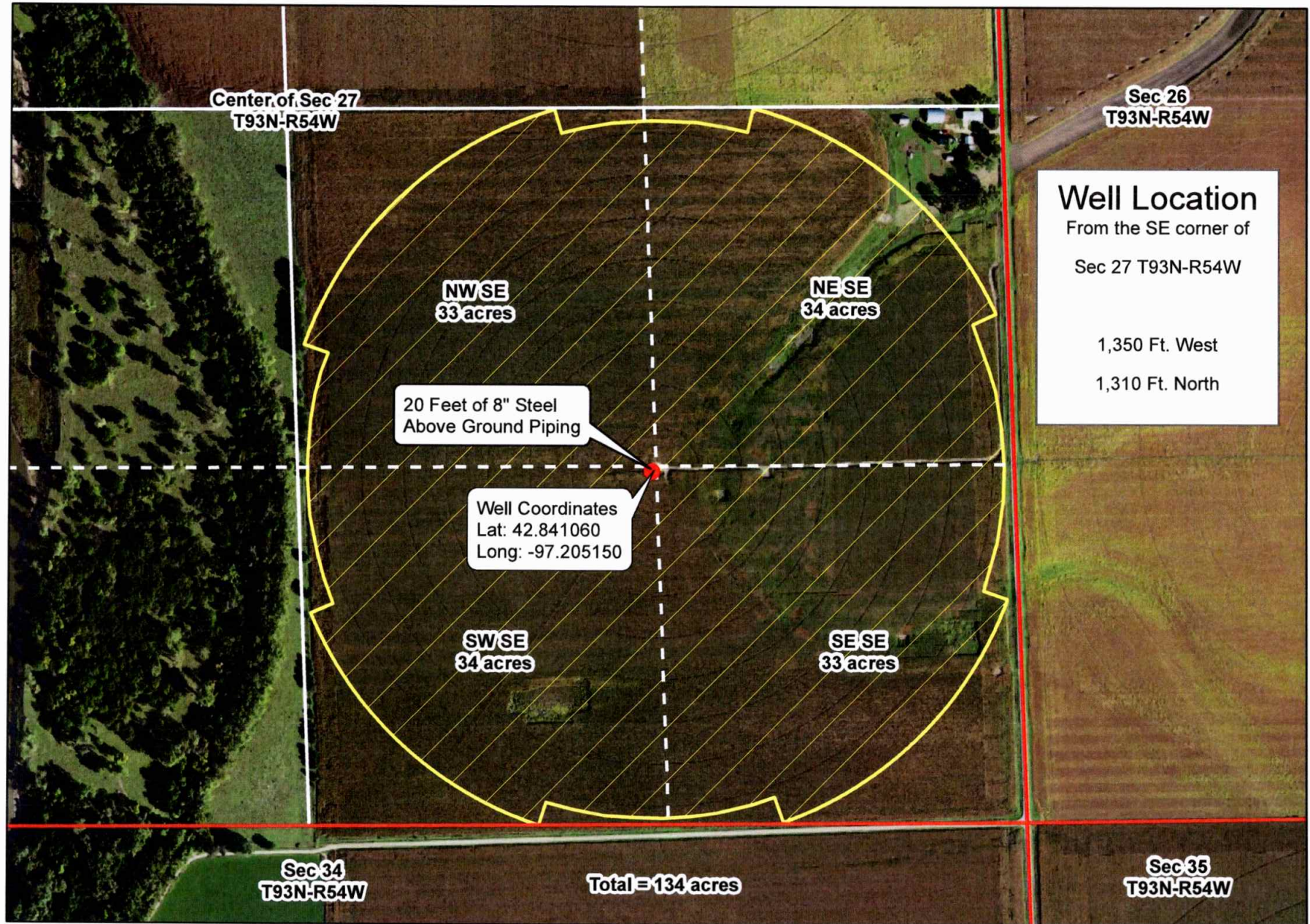
- 3) All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: The pump flow rate was provided by personnel from Preferred Pump. The pump flow rate is more that what was authorized by the permit.

Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: August 26, 2021

Water Right No. 7955-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
August 26, 2021

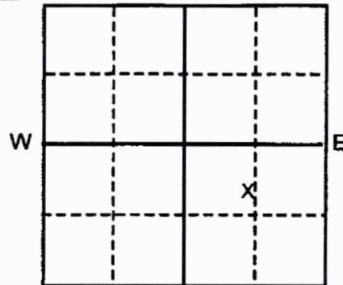
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ SE ¼ Sec 27 Twp 92N Rg 54W

County YANKTON

North

Please mark well
location with an "X"

Well Completion Date

4-13-2015

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,600.0 ft. from SEPTIC TANK (identify source)

PROPOSED USE:

☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes
☒ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring wellMETHOD OF DRILLING:
REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
160.0 LB/FT	16.00 IN	0.0 FT	40.0 FT	28.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	25	9.4 Lb/gal	0.0 Ft	25.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
TREMIPIE PIPE AND GROUT PUMP

SCREEN:

☒ Perforated pipe ☐ Manufactured
Diameter 16.00 Inches Length 100.0 Feet

Material PVC

Slot Size 50 Set From 40.0 Feet to 140.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? CHLORINE TABLETS☐ No, Why Not?Lab to which water
quality sample sent for analysis

Well Owner: KARL SCHENK & ALANA TAMISIEA

Business Name: STOP, DROP, AND LOCK

Address: 2502 BURLEIGH ST.

City, State, Zip: YANKTON SD 57078

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOPSOIL	0	2
CLAY	2	20
SAND	20	32
GRAVEL	32	90
ROCKS	90	120
GRAVEL ROCKS	120	140

STATIC WATER LEVEL 20.0 FEET

If flowing: closed in pressure PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:
☐ Bailed
☐ Other

TURBINE PUMP AND MOTOR

Pumping Level Below Land Surface

31.0 Ft. After 3.0 Hrs. pumped 1,500.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

This well was drilled under license # 805 and this
report is true and accurate.

Drilling firm: SAM HEINE WELL COMPANY, LLC

Signature of License Representative

Signature of Well Owner or Equitable Property Holder

RECEIVED

JUN 12 2015

Date: 4-13-15

WATER RIGHTS
PROGRAM



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

SEP 02 2021

7955-3

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Enclosed is Water License No. 7955-3. This is the final water right document completing your 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 in the future, the owner of an existing well, 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, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

NOTE: The investigation found your irrigation system capable of diverting 2.22 cubic feet of water per second (cfs) which is equivalent to approximately 1000 gallons per minute. The water permit authorized 1.78 cfs (800 gpm). The water license cannot be issued for an amount greater than originally permitted. Diversion of water under this water license is limited to 1.78 cfs.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7955-3**

(1) Karl M Schenk, 44352 308th St, Mission Hill SD 57046 made Application No. 7955-3, February 3, 2014 for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer), Yankton County, South Dakota for irrigation purposes. Permit No. 7955-3, with a priority date of February 3, 2014 was approved April 14, 2014 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 14, 2019 and for the application to beneficial use of said water on or before April 14, 2023.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,350'W and 1,310'N of the SE corner of Section 27, T93N, R54W (SW ¼ SE ¼)
Latitude 42.841060, Longitude -97.205150

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

T93N, R54W Section 27	NW ¼ SE ¼	33 acres	
	NE ¼ SE ¼	34 acres	
	SW ¼ SE ¼	34 acres	Total of 134 acres irrigated
	SE ¼ SE ¼	33 acres	

(4) Pursuant to South Dakota Water Law 46-5-30.1 Karl M Schenk, 44352 308th St, Mission Hill SD 57046 the holder and/or owner of Water Right No. 7955-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer) with a priority date of February 3, 2014 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7955-3 and subject to the following qualifications:

- The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right 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.
- The well authorized by Permit No. 7955-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the 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. ***The well was drilled by Sam Heine Well Company LLC. A copy of the well completion report is on file with the Water Rights Program.***
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.


Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

SEP 02 2021
date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 14, 2025

NOTICE

TO: KARL M SCHENK, 44352 308TH ST, MISSION HILL, SD 57046

FROM: Ron Duvall, Engineer III
for Eric Gronlund, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2024 Irrigation Questionnaires

Our records indicate your 2024 Irrigation Questionnaires have not been submitted. The request for the Questionnaires was dated October 23, 2024. The Water Management Board has directed owners of water permits who have not submitted the 2024 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 4506-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4855-3, 6838-3, 6839-3, 6917-3, 6918-3, 7017-3, 7667-3, 7668-3, 7670-3, 7819-3, 7842-3, 7939-3, 7955-3 & 8816-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held on **Wednesday, March 5, 2025, at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4855-3, 6838-3, 6839-3, 6917-3, 6918-3, 7017-3, 7667-3, 7668-3, 7670-3, 7819-3, 7842-3, 7939-3, 7955-3 & 8816-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 4506-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office before the **March 5, 2025**, hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaires for your use. If you have questions or need assistance, please contact Amanda Dewell at (605) 773-3352 or email at amanda.dewell@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://danr.sd.gov/iq> using this password: **ESGTCO****

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 17, 2025

4506-3, 4855-3, 6838-3, 6839-3
6917-3, 6918-3, 7017-3, 7667-3
7668-3, 7670-3, 7819-3, 7842-3
7939-3, 7955-3, 8192-3 & 8816-3

Karl Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

I am writing to acknowledge the receipt of your 2024 irrigation questionnaire(s).

You may disregard the January 14, 2025, "Notice" concerning the reporting requirements for Water Permit No(s). 4506-3, 4855-3, 6838-3, 6839-3, 6917-3, 6918-3, 7017-3, 7667-3, 7668-3, 7670-3, 7819-3, 7842-3, 7939-3, 7955-3 & 8816-3. The information was received prior to the March 5, 2025, Water Management Board meeting and the above listed permit number(s) have been removed from the agenda. However, the 2024 reporting has not been completed for 8192-3, held by Stop Lock Drop Inc.

Please contact our office to report 2024 irrigation water use for Water Right No. 8192-3, prior to March 5, 2025.

If you have any questions or concerns, please contact me.

Sincerely,

Amanda Dewell
Permitting Administrator
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us