

WATER PERMIT NO. 7670-3

Name of Applicant: Karl M Schenk

Address: 44352 308th St, Mission Hill SD 57046 Phone: 605 760-0363

Amount of Water Claimed: no add'l Total Acres: 50 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Yankton

Type of Waste Disposal System:

Location: 3 miles northeast of Mission Hill

PRIORITY Date Received: 1-28-13 Application/License Fee: \$ 700

Corrected Application Received: Period of Annual Use: April 1 – October 31

Remarks: Add'l acres to Water Permit No. 6916-3

Diversion Point: center of SE 1/4 Sec 17-T94N-
R54W

Land to be Irrigated: S 1/2 SE 1/4 Sec 17-T94N-
R54W

Depth of Well: 22 feet deep

Well Driller:

Remarks:

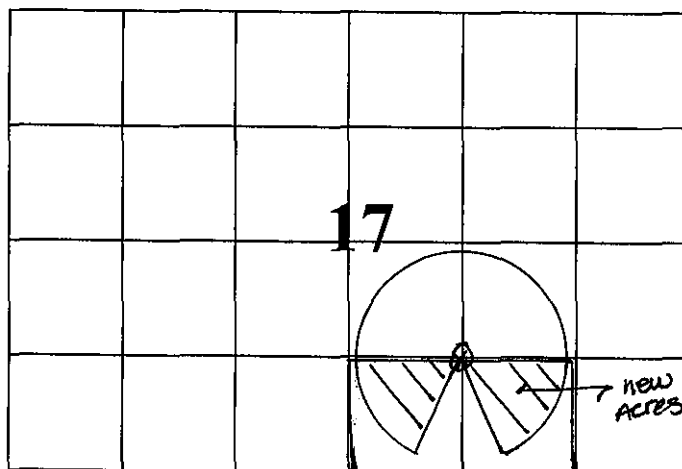
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 1-30-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



Mail to:
PMB 2020
DENR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

No. 7670-3 (office use only)
Hydrologic Unit 10170102
Basin James River
Newspaper Preso & Dakotan

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JAN 28 2013

WATER RIGHTS
PROGRAM

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.)

add acres to Water Permit #6916-3

1. Name of Applicant Karl M. Scheek Phone 605 773 0325
(check one) Owner ☐ Tenant/lessee

Mailing Address 114352 308th St MISSION Hill SD 57046
(Address) (City) (State) (Zip Code)

2. Amount of water claimed no add'l *CFS or GPM ***AF Total Acreage 50
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply well

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Yankton
center of the SE 1/4 section 17, T94N, Range 54 W

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used April 1 - October 31

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
<u>SW 1/4 SE 1/4</u>	<u>25</u>		
<u>SE 1/4 SE 1/4</u>	<u>25</u>		
<u>Sec 17 - T94N - R54W</u>			

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

STATE OF SOUTH DAKOTA)

County of Union)

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

I, Karl Scheek, 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.

Applicant's signature Karl M. Scheek

Subscribed and sworn to before me this 17 day of January 2013

DENISE SCHROEDER
Notarial seal - Iowa
Commission # 764552
My Commission Expires 9-7-2013

Denise Schroeder
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7670-3

Date of first receipt of application January 28, 2013.

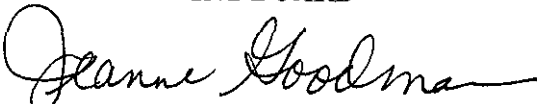
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7670-3 to Karl M Schenk, 44352 308th St, Mission Hill SD 57046 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7670-3 authorizes irrigation of 50 acres and a new well. Water Permit No. 6916-3 authorizes 1.78 cubic feet of water per second (cfs) from one well to be completed into the Missouri:Elk Point Aquifer located in the approximate center of the SE 1/4 Section 17 to irrigate 70 acres located in the N 1/2 SE 1/4 Section 17; all in T94N-R54W. This permit irrigates the 70 authorized acres and 50 new acres located in the S 1/2 SE 1/4 Section 17-T94N-R54W from a new well to be located in the center of the SE 1/4 Section 17-T94N-R54W. The existing well authorized by Water Permit No. 6916-3 will now be used under Permit No. 7669-3. This permit and Water Permit No. 6916-3 authorize a total of 1.78 cfs to irrigate 120 acres.
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 January 28, 2013.
4. The date of approval of Permit No. 7670-3 is April 1, 2013.
5. One-fifth of the construction is to be completed on or before October 1, 2015.
6. All construction is to be completed on or before April 1, 2018.
7. Water is to be put to beneficial use on or before April 1, 2022.
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 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.
2. The new well authorized by Permit No. 7670-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7670-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 120 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. 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 17 2013

date



White

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 22" Depth 97
- 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 55'
- 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 _____

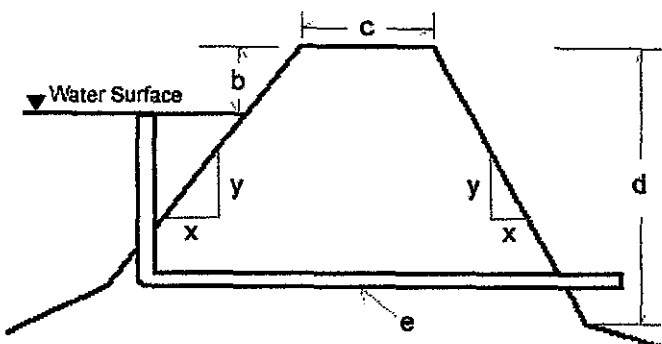
3. Dugout Information

- 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

KARL M SCHENK
FARM #6378

1560
2
3.46
NHEL

1560
1
25.07
NHEL

1560
3
44.13
NHEL

Existing
Permit
would
be
to
Reo

additional
or
new

7247
2
23.93
NHEL

7247
1
35.22
NHEL

7247
3
3.36
NHEL

7247
4
6.03
NHEL



United States Department of Agriculture
Farm Service Agency

PLSS: 17_94N_54W
Farm: 6378

Yankton County, SD
1:8,680

May 21, 2012



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Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area.
Refer to your original determination (CPA-026 and attached maps) for exact wetland
boundaries and determinations, or contact NRCS.

Mike Pfeiffer - PT
Yankton County FSA Office
11/15/12

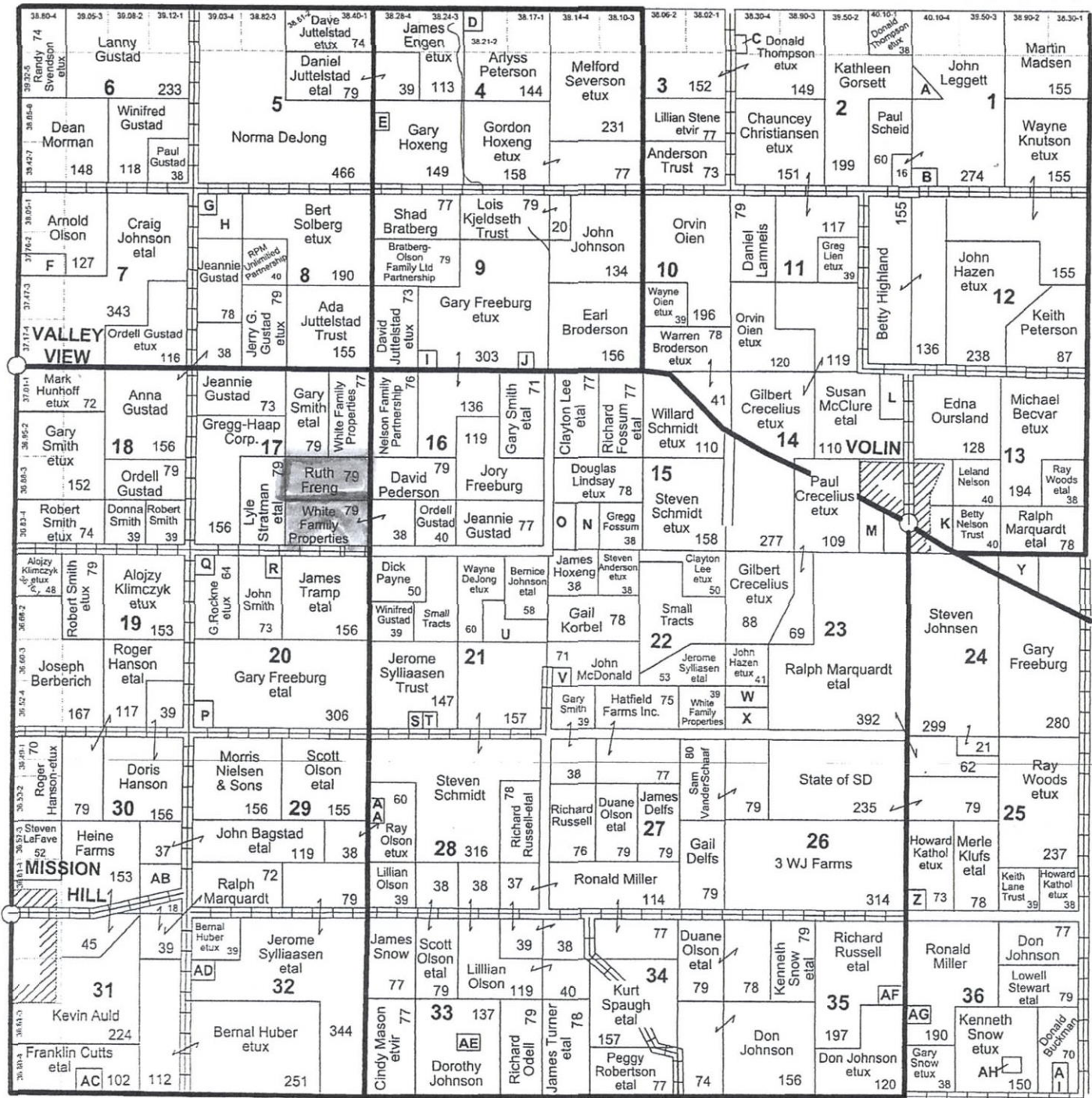
JAN 28 2013

WATER RIGHTS
PROGRAM**VOLIN TWP.**

Land Owner

T 94 N

R 54 W



- Section 1 A Kathleen Gorsett - 22
B Cecil Clay etux - 20
Section 2 C Kevin Brunke - 7
Section 4 D David Hoxeng etux - 10
E Patrick McDonald etux - 6
Section 7 F Chip Horton etux - 24
Section 8 G Lonny Lee etux - 14
H Chauncey Christiansen etux - 24
Section 9 I Shannon Goeden etux - 6
J Barbara Schnider - 7
Section 13 K Steve Gustad etux - 29
Section 14 L Merle Ludwig etux - 24

- Section 14 M Holly Madsen - 23
Section 15 N Brian Hoxeng etux - 19
O Gordon Hoxeng etux - 19
Section 20 P Kenton Wathier etux - 6
Q George Wathier etux - 13
R Roger Olson etux - 6
Section 21 S David Hovden etux - 9
T 3 WJ Farms - 10
U Melanie Solem etux - 40
Section 22 V Virgil Schmidt etux - 8
Section 23 W Lillian Olson - 20
X Scott Olson - 19

- Section 24 Y Delmar Adamson etux - 29
Section 25 Z Monte Davis etux - 5
Section 28 AA Jon Gunderson - 16
Section 30 AB Andrew Nielsen - 22
Section 31 AC James Busch etux - 11
Section 32 AD Jim Lyons etux - 18
Section 33 AE David Hicks etux - 18
Section 35 AF Christopher Bornitz etux - 8
Section 36 AG Gerald Johnson - 5
AH Richard Christopherson etux - 8
AI Brian Beach etux - 7

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/30, 20 13

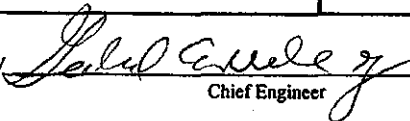
RECEIVED OF Karl Schenk 946 Wynstone Dr Jefferson Sd 57038

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

Fee for Application for Permit No. <u>7670-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	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>7670-3</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	700 00

No. 06058

By


Chief Engineer

Water Rights Program - File Documentation

NAME: Karl Schenk

ADDRESS: Mission Hill

DATE: 1-30-13

RE: Pending applications

Application for irrigation of 32 acres in Section 27 was okay.

Application for irrigation of 80 acres in Section 22 should include some acres in the SE 1/4 SW 1/4 which will be covered by the pivot making a windshield wipe. The well will be located in the S 1/2 SE 1/4 Section 22. They are requesting 600 gpm (1.33 cfs) from this well to irrigate 80 acres. They are requesting more than statutory limit because it is what is needed to operate the windshield wipe rotation.

Application for irrigation of 70 acres in the E 1/2 NE 1/4 Section 17. Mr. Schenk stated they will be using the existing well located in the N 1/2 SE 1/4 Section 17. This well was authorized by Water Permit No. 6916-3 and was to be located in the approximate center of the SE 1/4. The well was actually constructed in the N 1/2 SE 1/4 Section 17. The well will now longer be used to irrigate the acres authorized by No. 6916-3. They are proposing to run pipe from the well to the pivot (approximate center of the NE 1/4 Sec 17). They are requesting 600 gpm (1.33 cfs) from this well to irrigate 70 acres. They are requesting more than statutory limit because it is what is needed to operate the windshield wipe rotation.

Application for irrigation of 50 acres in the S 1/2 SE 1/4 Section 17. Mr. Schenk stated they are proposing to drill new well in the approximate center of the SE 1/4 Section 17 to irrigate the 70 acres authorized by Permit No. 6916-3 and an additional 50 acres located in the S 1/2 SE 1/4 Section 17 with one pivot making a partial rotation. Permit No. 6916-3 authorizes 800 gpm (1.78 cfs). This application would be for no additional water to irrigate a total of 120 acres.


Karen Schlaak
Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7670-3, 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. 7670-3, Karl Schenk, 44352 308th Street, Mission Hill SD 57046

The Chief Engineer is recommending APPROVAL of Application No. 7670-3 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 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.
2. The new well authorized by Permit No. 7670-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7670-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 120 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
March 13, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NOS. 7669-3 & 7670-3
KARL M SCHENK
February 22, 2013

Water Permit Application No. 7669-3 proposes to appropriate up to 140 acre-feet annually (ac-ft/yr) at a maximum diversion rate of 1.33 cubic feet of water per second (cfs) from one existing well completed into the Missouri: Elk Point aquifer. Water Permit No. 6916-3 authorizes a maximum diversion rate of 1.78 cfs from one well to irrigate 70 acres. The well is located in the N $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 17, T94N-R54W and is approximately 22 feet deep. This application proposes to irrigate 70 acres located in the E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 17, T94N-R54W in Yankton County. The applicant is requesting a diversion rate greater than the statutory limit.

Water Permit Application No. 7670-3 proposes to appropriate up to 100 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Missouri: Elk Point aquifer. The well will be located in the center of the SE $\frac{1}{4}$ of Section 17, T94N-R54W and is expected to be approximately 97 feet deep. Water Permit No. 6916-3 authorizes 1.78 cfs from one well completed into the Missouri: Elk Point aquifer located in the approximate center of the SE $\frac{1}{4}$ of Section 17 to irrigate 70 acres located in the N $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 17, T94N-R54W in Yankton County. This application proposes to irrigate the 70 authorized acres from Water Permit No. 6916-3 as well as 50 new acres located in the S $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 17, T94N-R54W in Yankton County. If approved, this application and Water Permit No. 6916-3 will authorize a total of 1.78 cfs to irrigate 120 acres.

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

GEOLOGY AND AQUIFER CHARACTERISTICS:

Bugliosi (1986) refers to the Elk Point management unit of the Missouri aquifer as the southern portion of the Lower James-Missouri aquifer. For water management purposes, the Water Management Board and the SD DENR-Water Rights Program refer to this aquifer as the Missouri: Elk Point. The aquifer is an alluvium mantled glacial outwash composed of fine sand to coarse gravel material (Bugliosi, 1986). The aquifer generally lies below the flood plain of the Missouri River, lies directly over and is hydraulically connected to the Dakota aquifer, and is hydraulically connected to the northern portion of the Lower James-Missouri and the Lower Vermillion-Missouri aquifers as well as the Missouri and Vermillion Rivers (Bugliosi, 1986). The aquifer is under unconfined conditions at each of the well sites proposed by these applications. The Elk Point management unit of the Missouri aquifer encompasses regions of Clay, Union, and Yankton Counties. The proposed well sites are located in southeastern Yankton County less than four and one quarter miles from the Clay and Yankton county line and less than six and three quarter miles north of the Missouri River. The Missouri: Elk Point aquifer underlies approximately 119,500 acres of Clay and Yankton Counties combined and contains an estimated 1,792,500 acre-feet of recoverable water in storage between the two counties (Hedges and others, 1982). The saturated thickness of the aquifer in the region ranges from approximately 50-150 feet thick (Bugliosi, 1986). The transmissivity of the aquifer ranges from 20,700 to 24,700 square feet per day (ft^2/d) (Bugliosi, 1986). The specific capacity of the aquifer ranges from approximately 124 to 173 gallons per minute per foot ($(\text{gal}/\text{min})/\text{ft}$) (Bugliosi,

1986). The well completion report submitted for Water Permit No. 6916-3 for Application No. 7669-3 reports a saturated thickness of approximately 99 feet for this area of the aquifer. The well site proposed by Application No. 7670-3 is in close proximity to the well site proposed by Application No. 7669-3 and is expected to be under similar aquifer conditions.

SDCL 46-2A-9

In accordance with SDCL 46-2A-9, a permit may be issued to appropriate water only if there is 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 review the availability of unappropriated water and existing rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY:

These applications propose to appropriate up to 240 ac-ft/yr from the Missouri: Elk Point aquifer. If these applications are approved, it is likely that the actual water use will be less than the appropriated amount. The probability of unappropriated water available from the aquifer can be evaluated using 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 that 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."

Recharge versus Discharge:

Recharge:

Recharge to the Missouri: Elk Point aquifer occurs through seepage from streams and by infiltration of precipitation (Bugliosi, 1986). Recharge is also provided to the aquifer from the Big Sioux, Lower Vermillion-Missouri, and Dakota aquifers as well as during times of high flow, from the Missouri River. The average annual recharge rate to the Missouri: Elk Point aquifer is estimated to be 3.8 in/yr based on observation well analysis (Hedges and others, 1985). Given the area of the management unit in Clay and Yankton Counties of 119,500 acres, average annual recharge to the aquifer in Clay and Yankton Counties is estimated to be 37,842 ac-ft/yr.

Discharge:

Discharge from the Missouri: Elk Point aquifer is by evapotranspiration, discharge to the Big Sioux and Missouri Rivers and underlying Dakota aquifer, and withdrawal from wells (Bugliosi, 1986). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Missouri: Elk Point aquifer (Water Rights, 2013b) and there are currently 507 water rights/permits appropriating water from the Missouri: Elk Point aquifer (Water Rights, 2013c). In addition, there are five future use permits reserving water from the aquifer. There are 212 water rights/permits appropriating water from this aquifer in Clay and Yankton Counties (Water Rights, 2013c). All five of the future use permits reserving water from the aquifer are from Clay County. The distribution of these appropriations and their types are shown in Table 1.

Water Rights/Permits	Number
Commercial	4
Domestic	1
Fish & Wildlife Propagation	4
Industrial	3
Irrigation	190
Municipal	6
Rural Water System	2
Suburban Housing Development	2
Future Use Permits	Number
Lewis & Clark Rural Water System	4
City of Vermillion	1

Table 1. Water rights/permits from the Missouri: Elk Point aquifer in Clay and Yankton Counties (Water Rights, 2013c).

The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming:

1. Water rights/permits limited by an annual volume will pump the entire volume appropriated.
2. Water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.
3. Future use permits can be fully developed.

The expected water use for non-irrigation purposes, including that reserved for future use, from the Missouri: Elk Point aquifer in Clay and Yankton Counties is less than 55,500 ac-ft/yr based on current water appropriations.

The annual reported water use from the Missouri: Elk Point aquifer for irrigation purposes in Clay and Yankton Counties is displayed in Table 2. The average annual use due to irrigation over the period of record is 5,145 ac-ft/yr.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	159	59580.2	4817.85
2010	152	56802.8	1205.86
2009	146	56330.8	2906.15
2008	135	53899.8	10120.26
2007	109	43852	11665.06
2006	97	41239	9825.11
2005	84	35725	6642.1
2004	78	34383.8	7311.97
2003	74	33687.8	7081.67
2002	74	33209.8	8193.25
2001	71	32471.8	6787.26
2000	69	31531.8	6271.02
1999	68	31351.8	4006.87
1998	69	31660.8	3867.62
1997	68	31875.2	5778
1996	67	31725.2	4291.2
1995	66	31080.8	4521.29
1994	69	32259.6	2499.98
1993	68	31794	330
1992	67	31218.8	871.35
1991	70	31302.8	7197
1990	67	32596.8	6694.5
1989	66	32506.8	6993.7
1988	64	31537.8	5989.25
1987	65	32021.8	4081.7
1986	71	34581.1	3060.8
1985	67	32217.8	3631.2
1984	70	33132.7	3448
1983	62	30963.8	4313.13
1982	60	30456	3392.5
1981	70	34049	4674
1980	52	29670	4523
1979	53	29670	2793
MIN	52	29670.00	330.00
MAX	159	59580.20	11665.06
AVE	79.61	35769.31	5145.02

Table 2. Irrigation from the Missouri: Elk Point aquifer in Clay and Yankton Counties (Water Rights, 1979-2011)

Lewis and Clark Rural Water System currently reserves 13,000 ac-ft/yr for future use and has permits appropriating 32,165 ac-ft/yr (Water Rights, 2013b). This accounts for a significant portion of the annual water usage in Clay County, and most of the water from these wells will be induced from the Missouri River. More recharge can be induced with more pumping in particular from the Missouri River because it is hydraulically connected to the aquifer. In 2011, the reported pumping for irrigation was 4,818 ac-ft/yr in Clay and Yankton Counties (Water Rights, 1979-2011).

There are a number of new permits and pending applications from the Missouri: Elk Point aquifer. Once they are developed, the average pumping for irrigation purposes is expected to increase significantly. Since January 1, 2012, there have been 45 permits issued from the Missouri: Elk Point aquifer authorizing irrigation for a total of 5,546.1 acres. The average annual withdrawal is still expected to be significantly less than the average annual recharge. The pending permits for appropriation of water from the Missouri: Elk Point aquifer are outlined in Table 3.

Permit No.	Diversion Rate (cfs)	Acres
7447-3	1.78	160
7460-3	3.11	264
7454-3	1.78	171
7527-3	1.11	117.5
7552-3	0.61	49
7553-3	1.55	136
7563-3	2.22	95
7565-3	1.89	160
7566-3	2.22	160
7554-3	1.89	136
7576-3	3.33	400
7577-3	2.0	70
7578-3	2.0	80
7579-3	2.0	152
7580-3	2.0	60
7593-3	1.5	105
7621-3	1.89	160
7622-3	1.89	142
7608-3	N/A	105
7606-3	N/A	78.8
7627-3	1.78	67
7630-3	3.34	160
7624-3	2.0	120
TOTAL	41.89	3148.3

Table 3. List of pending permits and their appropriations from the Missouri: Elk Point aquifer (Water Rights, 2013a).

Recognizing that Lewis and Clark RWS withdraw water from the Missouri: Elk Point aquifer that is induced from the Missouri River and considering the remaining hydrologic budget, there is reasonable probability that unappropriated water is available for the 240 ac-ft/yr appropriation proposed by these applications.

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 to the aquifer".

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. The observation well data shows that at the current level of development, climatic conditions mask the temporal effects of well withdrawals. The observation well data documents the hydraulic connection between the Missouri: Elk Point aquifer and the Missouri River (e.g. in particular, record high groundwater levels associated with flooding in 2011). Linear trend lines for the hydrographs do show a general gradual decline. This gradual decline may be attributed to entrenching the Missouri River (Goodman, 2007). Earlier well data from other observation wells shows that the gradual decline may also be due to controlling the flow of the Missouri River by the Gavins Point Dam, which no longer allows inundating of the floodplain (Stephens, 1967).

Because of this obvious hydraulic connection between Missouri: Elk Point aquifer and the Missouri River and the availability of water in the Missouri River, there is a reasonable probability that additional recharge to the Missouri: Elk Point will be induced with additional pumping. Additional pumping from the Missouri: Elk Point aquifer can also induce recharge from the underlying Dakota aquifer. Recognizing that natural discharge from the aquifer can be captured for pumping, there is reasonable probability that unappropriated water available from the aquifer to support these appropriations.

EXISTING WATER RIGHTS:

The well sites proposed by these applications are located in southeastern Yankton County less than four and one quarter miles from the Clay and Yankton county line and less than six and three quarter miles north of the Missouri River. There are nine water rights/permits that have diversion points within approximately one mile of the proposed well sites. The closest existing water right to either of the two well sites proposed by these applications is Water Permit No. 6897-3, for John and Jacqueline Smith, located over 2,900 feet southwest from the well sites proposed by Application Nos. 7669-3 and 7670-3. The well site for Water Right number 3399-3, for Ada Juttelstad, has an appropriated diversion rate of 1.79 cfs and is located approximately 800 feet west of the observation well, YA-78F, whose hydrograph is shown in Figure 2 (Water Rights, 2013c). The hydrograph shows that drawdown due to nearby withdrawals is not significant. Based on the observation well data and the distance between wells, drawdown is not expected to cause adverse impacts to existing water rights.

SDCL 46-5-6

Pursuant to SDCL46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cubic foot of water per second for every seventy acres, or "the equivalent thereof". The statute provides that the Water Management Board may allow a greater diversion if the method of irrigation so requires. Water Permit Application No. 7669-3 proposes to divert at a rate of 1.33 cfs per 70 acres. The diversion rate is required to properly operate the windshield wipe rotation irrigation system and is appropriate for the proposed use.

CONCLUSIONS:

1. These applications propose to appropriate up to 240 acre-feet annually for irrigation from the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply these proposed appropriations.
3. The Missouri: Elk Point aquifer is under unconfined (water-table) conditions in the proposed area, and drawdown from pumping is not expected to be significant very far from a production well.
4. There is a reasonable probability that the wells proposed by these applications will not adversely impact existing water rights or domestic wells.



Nicole Van Dyk
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- 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, SD.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Stephens, J.C., 1967, Geology and Hydrology of Clay County, South Dakota, Part II: Water Resources, SD DENR- Geological Survey Bulletin 19, 62 p.
- Water Rights, 1979-2011, Irrigation Questionnaire Summaries 1979-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

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MAR 25 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
PMB 2020
Joe Foss Building
523 East Capitol
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 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. 7667-3 thru 7670-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 22nd DAY OF March 2013 THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$45.18 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: 3/22/2013

FILED ON: 3/22/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 22nd DAY OF March 2013

[Signature]
NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 8/19/2015

Interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. 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 1, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$45.18.

NOTICE OF APPLICATION
NOS. 7667-3 thru 7670-3 to
Appropriate Water

Notice is given that Karl M Schenk, 44352 308th St, Mission Hill SD 57046 has filed the following applications for a water permit.

Application No. 7667-3 proposes to appropriate 0.67 cubic feet of water per second (cfs) from one well to be completed into the Lower James:Missouri Aquifer (140 feet deep) located in the center of the SE 1/4 SE 1/4 Section 27 for irrigation of 32 acres located in the SE 1/4 SE 1/4 Section 27; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7668-3 proposes to appropriate 1.33 cfs from one well to be completed into the Lower James:Missouri Aquifer (22 feet deep) located in the S 1/2 SE 1/4 Section 22 for irrigation of 80 acres located in the SE 1/4, SE 1/4 SW 1/4 Section 22; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7669-3 proposes to appropriate 1.33 cfs from one existing well completed into the Missouri:Elk Point Aquifer (22 feet deep) located in the N 1/2 SE 1/4 Section 17 for irrigation of 70 acres located in the E 1/2 NE 1/4 Section 17; all in T94N-R54W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7670-3 proposes to irrigate 50 acres and drill a new well. Water Permit No. 6916-3 authorizes 1.78 cfs from one well to be completed into the Missouri:Elk Point Aquifer located in the approximate center of the SE 1/4 Section 17 to irrigate 70 acres located in the N 1/2 SE 1/4 Section 17; all in T94N-R54W. This application proposes to irrigate the 70 authorized acres and 50 new acres located in the S 1/2 SE 1/4 Section 17-T94N-R54W from a new well to be located in the center of the SE 1/4 Section 17-T94N-R54W. The existing well authorized by Water Permit No. 6916-3 will now be used under Application No. 7669-3. This application, if approved, and Water Permit No. 6916-3 will authorize a total of 1.78 cfs to irrigate 120 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7667-3, 7668-3, 7669-3 and 7670-3 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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

March 14, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7667-3 thru 7670-3 to Appropriate Water. Please publish the notice once on March 22, 2013. 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**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

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

March 14, 2013

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Water Permit Application Nos. 7667-3 thru 7670-3 for irrigation use have 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 recommendations of the Chief Engineer and reports on the applications 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(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

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 applications.

Instruction to Newspaper - Publish the Notice on March 22, 2013. 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 NOS. 7667-3 thru 7670-3 to Appropriate Water

Notice is given that Karl M Schenk, 44352 308th St, Mission Hill SD 57046 has filed the following applications for a water permit.

Application No. 7667-3 proposes to appropriate 0.67 cubic feet of water per second (cfs) from one well to be completed into the Lower James:Missouri Aquifer (140 feet deep) located in the center of the SE 1/4 SE 1/4 Section 27 for irrigation of 32 acres located in the SE 1/4 SE 1/4 Section 27; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7668-3 proposes to appropriate 1.33 cfs from one well to be completed into the Lower James:Missouri Aquifer (22 feet deep) located in the S 1/2 SE 1/4 Section 22 for irrigation of 80 acres located in the SE 1/4, SE 1/4 SW 1/4 Section 22; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7669-3 proposes to appropriate 1.33 cfs from one existing well completed into the Missouri: Elk Point Aquifer (22 feet deep) located in the N 1/2 SE 1/4 Section 17 for irrigation of 70 acres located in the E 1/2 NE 1/4 Section 17; all in T94N-R54W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7670-3 proposes to irrigate 50 acres and drill a new well. Water Permit No. 6916-3 authorizes 1.78 cfs from one well to be completed into the Missouri:Elk Point Aquifer located in the approximate center of the SE 1/4 Section 17 to irrigate 70 acres located in the N 1/2 SE 1/4 Section 17; all in T94N-R54W. This application proposes to irrigate the 70 authorized acres and 50 new acres located in the S 1/2 SE 1/4 Section 17-T94N-R54W from a new well to be located in the center of the SE 1/4 Section 17-T94N-R54W. The existing well authorized by Water Permit No. 6916-3 will now be used under Application No. 7669-3. This application, if approved, and Water Permit No. 6916-3 will authorize a total of 1.78 cfs to irrigate 120 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7667-3, 7668-3, 7669-3 and 7670-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

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The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

MAY 17 2013

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Enclosed are Water Permit Nos. 7667-3, 7668-3, 7669-3 and 7670-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses 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

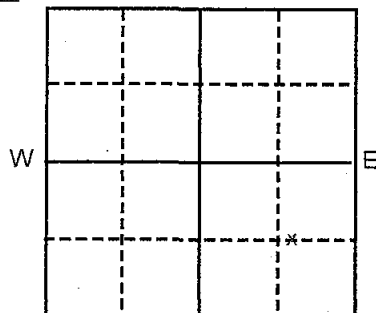
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location se ¼ se ¼ Sec 17 Twp 94n Rg 54wCounty Yankton

North

Please mark well
location with an "X"

Well Completion Date

8/21/12

 Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
3,500.0 ft. from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

bucket

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16.00 IN	0.0 FT	60.0 FT	24.00 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	24	Lb/gal	0.0 Ft	50.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie method

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 37.0 FeetMaterial pvcSlot Size .060 Set From 60.0 Feet to 97.0 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?

☒ No, Why Not? NA
 Lab to which water
 quality sample sent for analysis
Well Owner: Karl SchenkBusiness Name: Schenk Family PartnershipAddress: 44352 308th StreetCity, State, Zip: Mission Hill SD 57046

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Clay, brown, silty,	0	39
clay, gray, silty,	39	55
gravel, coarse, sandy	55	96
claystone, gray, silty	96	97

STATIC WATER LEVEL 21.0 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: air lift development, 3 hours
☐ Bailed
☒ Other

Pumping Level Below Land Surface

30.0 Ft. After 2.0 Hrs. pumped 640.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: 640.0 GPM

REMARKS

RECEIVED

FEB - 1 2013

WATER RIGHTS
PROGRAMThis well was drilled under license # 666 and this report is true and accurate.Drilling firm: Hammond-Wetmore Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 12-12-12

RECEIVED

SEP 09 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 9-4-13

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: Karl Schenk
(name)
44352 308th Street
(address)
Mission Hill SD 57046 605 760 0363
(city, state, zip) (phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

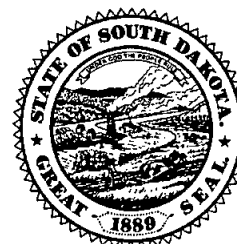
Water Permit No. 7670-3 states that the water use system is to be constructed by April 1 2022, and water is to be put to beneficial use by April 1 2022.
(date) (date)

The water use system was completed on July 5 2012.
(date)

Applying the water to beneficial use was completed on July 5 2012.
(date)

You may schedule an investigation so that the water license may be issued.

K Schenk
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

September 13, 2013

Karl Schenk
44352 308th St
Mission Hill SD 57046

RE: Completion of Works

Dear Mr. Schenk:

I am writing to acknowledge receipt of the "Notice of Completion of Works" forms that you submitted to let us know that you are completed with your irrigation systems authorized by Water Permit Nos. 7819-3, 7842-3, 7667-3, 7669-3 and 7670-3. The copies of the water permits you included are yours to keep and I am returning them to you for your files.

The systems are now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between completion of the projects and the staff inspection has no bearing on your water permits.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. 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
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

7670-3

Form 12

**Permit Nos. 6916-3 and 7670-3
Yankton County**

Report of Examination of Works and/or Application of Water to Beneficial Use

To: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, September 22, 2014 made a thorough examination of the water system used by the Karl M Schenk, 44352 308th St., Mission Hill, SD 57046, holder of Water Permit Nos. 6916-3 and 7670-3, bearing the priority dates of December 7, 2007 January 28, 2013, respectively. Water Permit No. 6916-3 authorizes the diversion of 1.78 cubic feet per second (cfs) or 800 gallons per minute (gpm) from one well completed into the Missouri: Elk Point aquifer at approximately 80 feet below ground surface for the purposes of irrigating 70 acres in Yankton County as follows: 35 acres in the NE ¼ SE ¼ Section 17, 35 acres in the NW ¼ SE ¼ Section 17, all in T94N-R54W.

Water Permit No. 7670-3 utilizes the well constructed under Water Permit No. 6916-3 and does not authorize an increase in the maximum diversion rate of 1.78 cfs or 800 gpm. It does authorize the irrigation of an additional 50 acres in Yankton County as follows: 25 acres in the SW ¼ SE ¼ Section 17, 25 acres in the SE ¼ SE ¼ Section 17, all in T94N-R54W.

I have the following conditions to report for the system in question:

- 1) Works used to divert water:
One irrigation pump, manufactured by Kroy Midwest.
- 2) Works used to transport water to a place of use:
Underground pipes, 8 inch diameter.
- 3) Works used to apply water to beneficial use:
One Zimmatic Pivot

The system is in the following condition: well maintained. The exact location the well is as follows:

- 1) **In the approximate center of the SE ¼ of Section 17. 1,300 feet north and 1,300 feet west of the southeast corner of Section 17. Lat 42.95632N Lon 97.24456W.**

The lands irrigated by the fore mentioned well are as follows:

- 1) 35 acres in the NW ¼ SE ¼ of Section 17, T94N-R54W.
- 2) 35 acres in the NE ¼ SE ¼ of Section 17, T94N-R54W.

For 70 acres authorized under Water Permit No. 6916-3

- 3) 25 acres in the SE ¼ SE ¼ of Section 17, T94N-R54W.
- 4) 25 acres in the SW ¼ SE ¼ of Section 17, T94N-R54W.

For 50 acres authorized under Water Permit No. 7670-3, and a total of 120 acres.

License should be issued for the developed diversion rate of: **1.78 cfs or 800 gpm**

Applicable permit qualifications have been complied with: **Yes**

Exceptions to compliance are: **None**

Date Report Completed: **June 8, 2015**



Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program

FIELD INVESTIGATION REPORT FOR WATER PERMIT NOS. 6916-3 and 7670-3

DATE OF INVESTIGATION:	September 22, 2014
NAME & ADDRESS OF PERMIT HOLDER	Karl M Schenk 44352 308th St. Mission Hill, SD 57046
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Karl M Schenk
DIVERSION POINT LEGAL LOCATIONS	In the approximate center of the SE ¼ of Section 17. 1,300 feet north and 1,300 feet west of the southeast corner of Section 17. Lat 42.95632N Lon 97.24456W.

WELL INFORMATION:

- 1) Well Drilling Firm:
Hammond Wetmore Drilling, LLC
- 2) Number of Wells: **1**
- 3) Depth: **97 feet**
- 4) Well Log Available: **Yes**
- 5) Comment:

Pumps

- 1) Make: **Kroy Midwest**
- 2) Model: **CVMW8**
- 3) Size:
- 4) Capacity: **800 gpm**

Casing

- 1) Diameter: **16 inches**
- 2) Length: **60 feet**
- 3) Type: **Plastic**

Screen

- 1) Type: **Manufactured**
- 2) Length: **37 feet**
- 3) Static Water Level: **21 feet**

Motor

- 1) Make:
- 2) Model No:
- 3) Power: **75 hp**

System Type

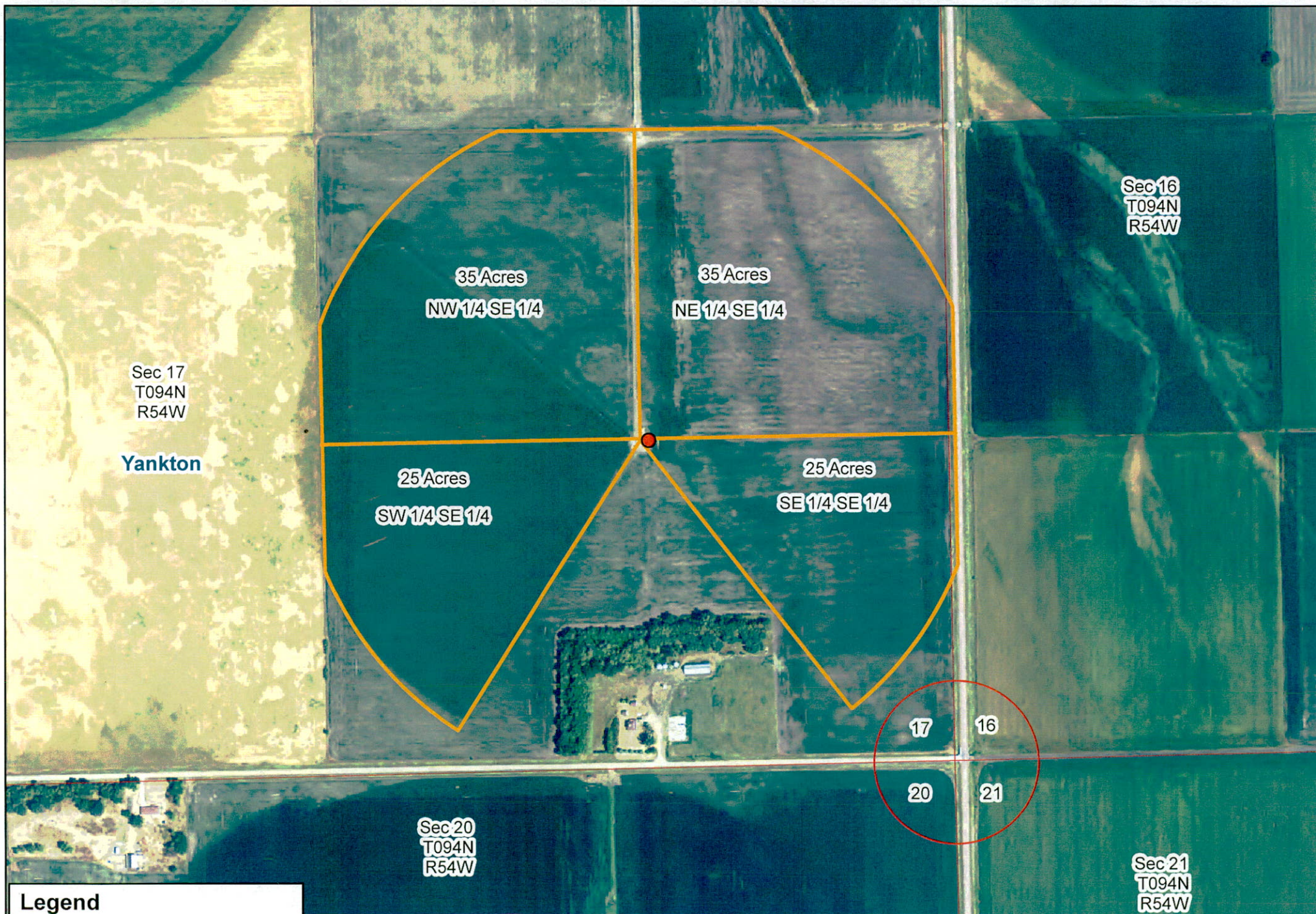
- 1) Make: **1 Zimmatic Pivot**
- 2) Overall length: **1,300 feet**
- 3) Number of Towers: **7 towers**
- 4) End Gun: **Yes**
- 5) Pressure:
- 6) Capacity: **800 gpm**

CHEMIGATION EQUIPMENT: No

- 1) Mainline Check Valve:
- 2) Low Pressure Drain:
- 3) Inspection Port/Air Relief:
- 4) Discharge 20 Feet Away:
- 5) Injection Line Check Valve or Positive Displacement Pump:
- 6) Injection Check Valve:
- 7) Properly Installed:

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by: **N/A**
- 2) All structures, wells, and lands on map: **Yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by end of construction period: **Yes, irrigation from 2012 to present in the case of Water Permit No. 6916-3 and from 2013 to present in the case of Water Permit No. 7670-3.**

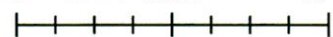


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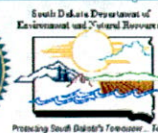
-  Irrigated_Acres
-  Section Boundaries - PLSS
-  Well Location



0 0.04 0.08 0.16 Miles




Prepared by Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JUN 18 2015

Karl M Schenk
44352 308th St
Mission Hill SD 57046

Dear Mr. Schenk:

Enclosed are Water License Nos. 6838-3, 6917-3, 6918-3, 6939-3, 7240-3, 7241-3, 7670-3, 7819-3 and 7842-3. These are the final water right documents completing your process of obtaining a Water Right. Also, included with each license is a map prepared by the staff engineer who conducted the investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the wells authorized by these water rights, 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 Licenses, 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,


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

Note: The applicable portions of No. 6916-3 are incorporated into Water License No. 7670-3.
The applicable portions of No. 7669-3 are incorporated into Water License No. 7842-3.

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7670-3

(1) Karl M Schenk, 44352 308th St, Mission Hill SD 57046 made Application No. 7670-3, January 28, 2013 for a water permit to irrigate 50 additional acres and to divert no additional water from one existing well (Missouri:Elk Point Aquifer), Yankton County, South Dakota for irrigation purposes. Permit No. 7670-3, with a priority date of January 28, 2013 was approved April 1, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 1, 2018 and for the application to beneficial use of water on or before April 1, 2022.

Water Permit No. 6916-3, with a priority date of December 7, 2007 authorizes 1.78 cubic feet of water per second (cfs) from one well (Missouri:Elk Point Aquifer) to irrigate 70 acres. The applicable portions of No. 6916-3 are incorporated into this Water License No. 7670-3.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 7670-3 is issued a license, bearing priority dates of December 7, 2007 and January 28, 2013 to appropriate 1.78 cubic feet of water per second from one well (Missouri:Elk Point Aquifer) to irrigate 120 acres.

The diversion point is located: 1,300 feet north and 1,300 feet west of the SE corner of Section 17-T94N-R54W (approximate center of SE1/4). The acres authorized for irrigation are as follows:

			<u>Priority Dates</u>
Section 17-T94N-R54W	NW 1/4 SE 1/4	35 acres	December 7, 2007
	NE 1/4 SE 1/4	35 acres	December 7, 2007
	SE 1/4 SE 1/4	25 acres	January 28, 2013
	SW 1/4 SE 1/4	<u>25 acres</u>	January 28, 2013
	Total	120 acres	

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 7670-3 including the following qualifications:

- The well 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.
- The well authorized by this Permit 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.
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit Nos. 6916-3 and 7670-3 authorize a maximum diversion rate of 1.78 cfs for the irrigation of 120 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

JUN 18 2015

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