

Water Right Number 2311-3

1. Considered JULY 24, 1975
2. Name of Applicant MINNEHAHA COMMUNITY WATER CORP.
3. Post Office Address SIOUX FALLS
4. Amount of Water claimed 4.0
5. Source of Water supply 5 OR MORE WELLS TO 50' DEEP
6. Water to be used for COMMUNITY WATER SYSTEM

Acres to be irrigated _____

7. Water to be diverted and used in MINNEHAHA County
about 2 1/2 miles of DELL RAPIDS

8. Proc. of Publication Received 7-22-75

Not Received _____

9. Application Approved _____

Subject to _____

Not Approved _____

Action Deferred _____

10. Remarks:

Map No. 1693-3 Water Division No. 3 BIG SIOUX RIVER District
(Blanks to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

(NOTE - Draw a line through items not applicable)

1. Name of Applicant Minnehaha Community Water, Corp.
Postoffice address P.O. Box 2000, Sioux Falls, State South Dakota
If a corporation show date and place of incorporation March 15, 1973; Sioux Falls, South Dakota
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract
3. Name of division work MCWC Wells
4. Amount of water claimed (cubic feet per second) 4 cfs
5. Source of water supply Wells
6. Location of point of diversion East Half of Northeast Quarter (E½ NE¼) of Section 29, Town-
ship 104 North, Range 49 West of the Fifth Principal Meridian
County Minnehaha
7. Annual period or periods during which water is to be used Continuous
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Rural Water System
9. For irrigation use, Total number of acres to be irrigated ---

List below each forty-acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.	Land Description	No. Acres Irr.

Attach sheet if more space is needed

10. Time required to complete construction of water supply system -2-5 years. Additional time required to complete application of water to the proposed beneficial use -1-4 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Sioux Falls Argus Leader
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Wells varying in number depending on pumping capacity of each as constructed.

B. Works proposed to transport water to place of use.

Pipeline from wells to water treatment plant and system of distribution lines, elevated tanks, pumping stations and associated facilities.

C. Works proposed to apply water to beneficial use.

Rural water distribution system.

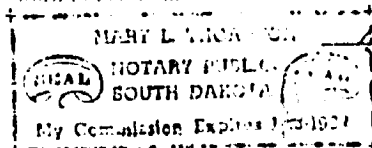
Estimated Total Cost \$ 6,000,000.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.
(See instructions concerning preparation.)

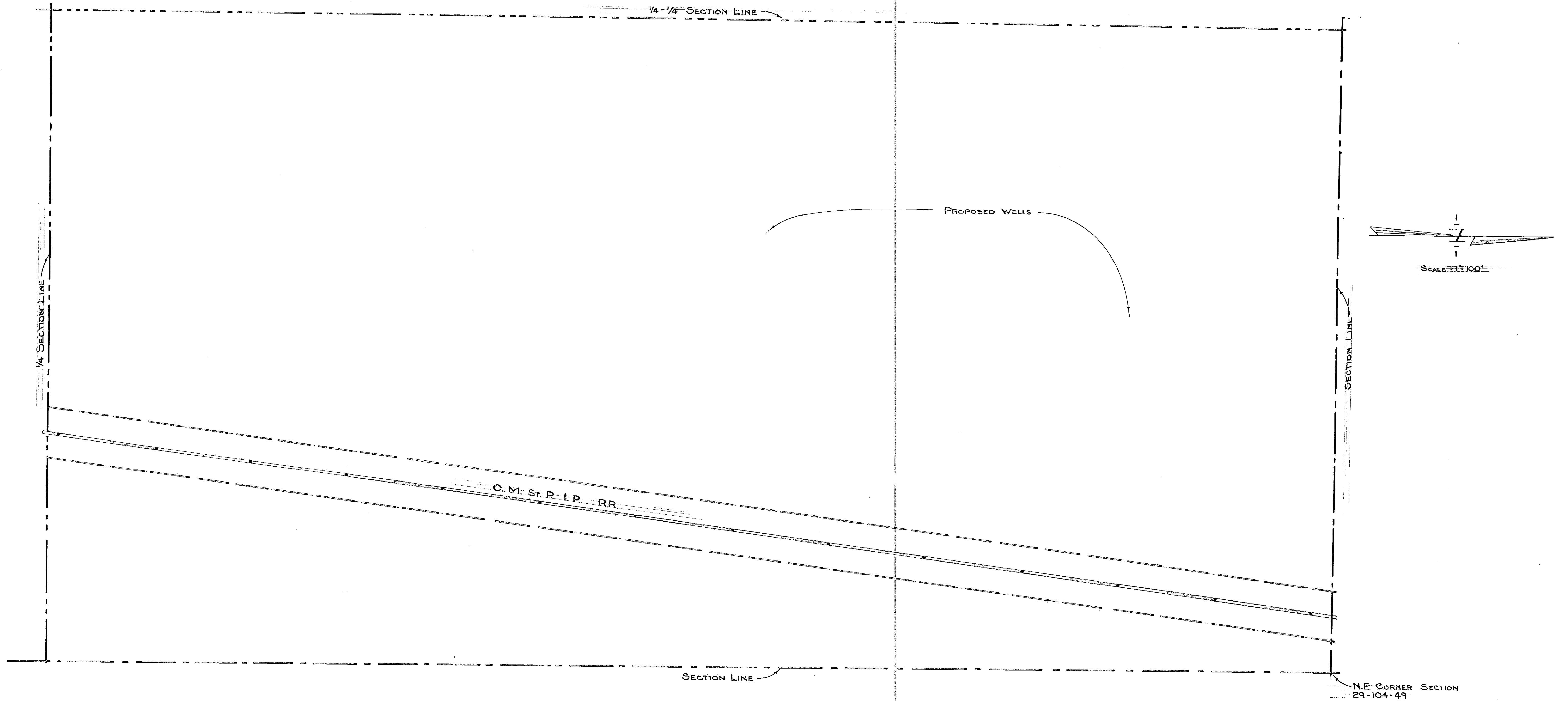
STATE OF SOUTH DAKOTA

County of MinnehahaI, ELMER HAUGEN, JR., Secretary of the Minnehaha Community Water, Corp.

the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed Elmer Haugen, Jr.Subscribed and sworn to before me this 7th day of July, 1975

Notary Public (or other qualified officer)



MINNEHAHA COMMUNITY WATER, CORP. MINNEHAHA COUNTY, SOUTH DAKOTA

LOCATION OF DIVERSION
EAST HALF OF NORTHEAST QUARTER (E 1/2 NE 1/4) OF
SECTION 29, TOWNSHIP 104 NORTH, RANGE 49 WEST
OF THE FIFTH PRINCIPAL MERIDIAN, MINNEHAHA
COUNTY, SOUTH DAKOTA.

SURVEYORS CERTIFICATE

I, D.C. KALDA, REGISTERED LAND SURVEYOR OF THE STATE OF
SOUTH DAKOTA, DO HEREBY CERTIFY THAT I HAVE ON AND BEFORE
JULY 7, 1975, MAPPED THE AREA AS SHOWN ABOVE FOR THE PURPOSE
OF WATER APPROPRIATION

DATED THIS 7TH DAY OF JULY, 1975.

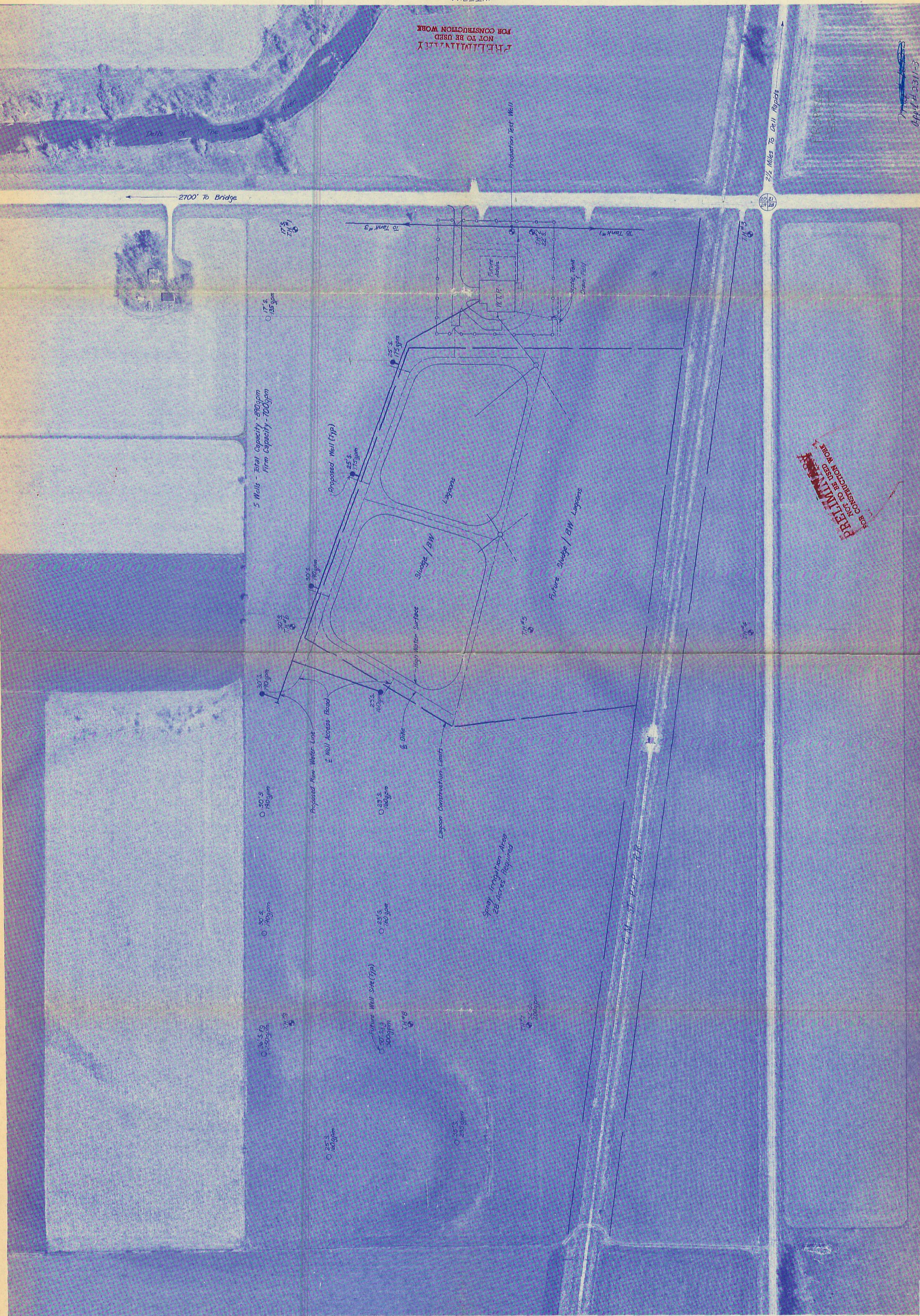
D.C. Kalda
D.C. KALDA, REG. LAND SURVEYOR

STATE OF SOUTH DAKOTA
COUNTY OF MINNEHAHA

ON THIS 7TH DAY OF JULY, 1975 BEFORE ME THE UNDERSIGNED,
A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE APPEARED
D.C. KALDA, WELL KNOWN TO ME TO BE THE PERSON DESCRIBED ABOVE
AND WHO ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING
CERTIFICATE.

MY COMMISSION EXPIRES
LUCILLE E. MCORSHICK
My commission expires September 1, 1976

Lucille E. McOrshick
NOTARY PUBLIC, SOUTH DAKOTA



BEFORE CONSTRUCTION BE TOTAL TO BE USED FOR CONSTRUCTION WORK

2 1/2 Miles To Dell Rapids

2700' To Bridge

PRELIMINARY NOT TO BE USED FOR CONSTRUCTION WORK

Sheet # 2311-3

WATER RIGHT APPLICATION APPROVAL

The Water Resources Commission hereby approves Water Right Application No. 2311-3
MINNEHAHA COMMUNITY WATER, CORP., P.O. BOX 2000, SIOUX FALLS
 (Applicant) (Post Office Address)
SOUTH DAKOTA 57102 With the following modifications:
 (State)

The ~~irrigation~~ well approved under this Permit is located near domestic wells which may obtain water from the same aquifer. The ~~irrigation~~ well owner, under this Permit, shall control his ~~irrigation~~ withdrawals so there is not a reduction of needed water supplies in existing domestic wells.

Date of first receipt of application JULY 8, 19 75
 Date of return to applicant for correction, amendments or changes required —, 19 —
 Date of receipt of corrected application —, 19 —
 Approved JULY 24, 19 75 Recorded in Book 14 Page 10

WATER RIGHT PERMIT NO. 2311-3

The Water Resources Commission hereby grants and issues this Water Right Permit No. 2311-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is JULY 8, 19 75
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before JULY 24, 19 76
3. The whole of said work is to be completed on or before JULY 24, 19 77
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is JULY 24, 19 78
5. The water appropriated shall be used for the purpose of RURAL WATER SYSTEM USE
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.
7. The amount of the appropriation herein granted shall not exceed 4.0 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for ~~beneficial use served, and if for the irrigation purpose, said appropriation must be limited to not more than 3 acre feet per year and be limited to not more than one centieth (1/100) of one cubic foot of water per acre and of time for each acre of land to which water is~~
USED FOR RURAL WATER SYSTEM USE actually and beneficially ~~applied for irrigation~~ on or before JULY 24, 19 78; said water to be used during the following described annual period: CONTINUOUSLY

Witness my hand this 4TH day of AUGUST, 19 75

WATER RESOURCES COMMISSION

By:

Vern W. Butler
 Chief Engineer, Executive Officer

Certificate of Construction Issued —, 19 —

Water License Issued —, 19 —

Form 5. - Notice of Intent to Appropriate Water

No. 2311-3

Publish first publication, on or before

July 14, 1975

NOTICE OF INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

July 8, 1975

Notice is hereby given that the Minnehaha Community Water, Corp.
whose post office address is Sioux Falls, South Dakota, has made an
application in accordance with the provisions of the water laws of South Dakota for
a permit to appropriate for beneficial use 4.00 cubic feet of water per
second of time from the ground water through the
NCWC Wells, the point of diversion of which are to
be located in the _____

E 1/2 NE 1/4

of Section 20, Twp. 104N Range 49W. Said water to be used
for the purpose of providing ~~irrigation on the following described land:~~
supplies for operation of the rural water system

This application No. 2311-3 will be considered by the Water Rights
Commission at the North Lounge, Surbeck Center, S.D. School of Mines at
Rapid City, South Dakota

upon the 24th day of July, 1975 at 2:30 P. M. All
interested persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON F. JONES, Water Rights Specialist

UFJ/bw

cc:

Elmer Haugen, Jr., Secretary, Minnehaha Community Water Corp.
Box 2000, Sioux Falls, South Dakota 57102

Form 8 Proof of Publication - Notice of
Intent to Appropriate Water

No. 2311-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Minnehaha) ss.

I, JOHN K. KOLL hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Sioux Falls Arroyo-Leader

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the

City of Sioux Falls

County of Minnehaha and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

Monday, July 14

Monday, July 21

John K. Koll
(Signature)

Controller

(Title)

July 21, 1975

(Date Signed)

NOTICE OF INTENT TO APPROPRIATE WATER
Pierre, South Dakota, 57501
July 4, 1975
Notice is hereby given that the Minnehaha Community Water, Corp. whose post office address is Sioux Falls, South Dakota, has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 4.00 cubic feet of water per second of time from ground water through the MCW's wells, the points of diversion of which are to be located in the E1/4 NE1/4 of Section 29, Twp. 184N, Range 49W. Said water is to be used for the purpose of providing supplies for operation of the rural water system.
This application No. 2311-3 will be considered by the Water Rights Commission at the Harbison Lounge, Surbeck Center, S.D. School of Mines at Rapid City, South Dakota upon the 24th day of July, 1975 at 2:30 P.M. All interested persons may appear and be heard.
By: Burton E. Jones,
Water Rights Specialist
July 14, 21, 1975

RECEIVED
JUL 22 1975

STATE WATER RIGHTS COM. /
PIERRE, SOUTH DAKOTA

REPORT ON GROUND WATER EXPLORATION
MINNEHAHA COMMUNITY WATER CORPORATION

2311-3
Minnehaha
Community
Water
Corp.

SCHMITZ, KALDA & ASSOCIATES
HOSKINS-WESTERN-SCHNEIDER, INC.

March 18, 1974

I. INTRODUCTION.

Investigations to locate a ground water source of water supply for the Minnehaha Community Water Corporation (MCWC) to serve the countywide rural water system have been conducted. The investigations included a review of available data in published and unpublished form, conferences with agencies and individuals, independent studies, test hole drilling, and a production test well. On the basis of the findings and other design considerations, a site for the wells and treatment plant is recommended.

The site recommended is the East Half of the Northeast Quarter (E $\frac{1}{2}$ NE $\frac{1}{4}$) of Section 29, T104N, R49W, Minnehaha County, South Dakota. The data provided in this report indicates the site, except for the extreme easterly portion, is underlain with water bearing sands and gravels having a thickness from 15 to 30 feet. The site is subject to flooding, however, the facilities can be designed for such conditions.

Test holes were drilled at two sites, one along Skunk Creek and the other along the Big Sioux River. Information and data on these investigations are included in this report.

II. SKUNK CREEK SITE.

Published data indicates that the aquifer along Skunk Creek is a potential source of ground water. The chemical quality of the water, particularly in lower reaches, is generally poor. The upper reaches in Moody and Lake County are indicated to have abundant supplies of water, however, the chemical quality is indicated to be no better than that of the water in the Big Sioux River aquifer at the recommended well site. Iron and manganese in concentrations requiring removal are prevalent in both the Skunk Creek and Big Sioux River aquifers. The possible construction of a dam on Skunk Creek north of Hartford also limits the area in which a water supply could be developed.

One test hole was drilled at approximately the center of Section 16, T104N, R50W, Minnehaha County, South Dakota. The results of the test hole drilling are attached and are summarized as follows:

0-15'-----Dry Sand
15-20-----Sand & Shale (Wet)
20-32-----Sand
32-87-----Yellow Clay
87-----Quartzite

The limited depth and poor quality of formation led to the decision to stop drilling in this area. The maximum probable yield from the formation was estimated to be less than 100 gallons per minute and the quality would in all probability be poor.

III. BIG SIOUX RIVER SITE.

A. General. Data in Special Report 39, Ground Water Supply for the City of Dell Rapids, South Dakota (1967), by the South Dakota Geological Survey and additional investigations indicated the existence of a shallow aquifer in an area approximately two miles south of Dell Rapids on the east side of the Big Sioux River. Test holes and a production test well were drilled on an 80-acre tract described as the East Half of the Northeast Quarter (E $\frac{1}{2}$ NE $\frac{1}{4}$) of Section 29, T10-N, Range 49W, Minnehaha County, South Dakota.

The location of the test holes and the production test well are shown on Exhibit 1.

B. Test Hole Data. Field reports of the test holes are attached. A summary of the data follows:

Test Hole	Topsoil & Till	Water Bearing Sand & Gravel	Clay & Silt	Top of Quartzite
1.	0-18'	18' - 35'	35' - 57'	57'
2.	0-20'	20' - 42'	-	42'
3.	0-21'	21' - 25'	-	25'
4.	0-21'	21' - 31'	-	31'
5.	0-24'	24' - 41'	-	41'
6.	0-20'	20' - 50'	-	50'
7.	0-22'	22' - 52'	-	52'
8.	0-20'	20' - 46'	46' - 97'	97'
9.	0-18'	18' - 59'	-	59'

The water bearing formations west of the railroad right-of-way will produce relatively large amounts of water. Generally all the area tested west of the railroad has good formations in which wells can be developed.

C. Production Test Well. Test hole No. 2 was cased with a 2-inch casing and made into an observation well. The production test well was located approximately 50 feet west of the observation well. The production test well was 40 feet deep with a casing and screen diameter of 8 inches. Formations were as shown for Test Hole No. 2.

The production test well was pumped continuously for 24 hours with a submersible pump. Field records of the pumping test are attached. A summary of the test pumping results follows:

Static Water Level-----10 Feet
Pumping Rate-----240 GPM
Drawdown in Well-----17 Feet
Yield-----14 Gal/Ft. Drawdown
Drawdown in Observation Well-----2 Feet

The results indicate a high transmissibility in the formation. Drawdown in the observation well was low indicating that well spacing will not be critical. Spacing between wells is recommended to be in the order of 300 to 400 feet depending on the capacity of each well. The potential development of 10 to 12 wells each with a minimum capacity of 200 gallons per minute on the approximately 60-acre site west of the railroad right-of-way is indicated. Production from 10 wells of 200 gallons per minute represents a daily pumpage of almost 3 million gallons.

The chemical quality of the water is shown as follows:

Total Alkalinity-----	290 mg/l as Ca CO ₃
Calcium-----	210 mg/l as Ca CO ₃
Magnesium-----	110 mg/l as Ca CO ₃
Total Hardness-----	420 mg/l as Ca CO ₃
	24.5 Grains/Gallon
Sulfate-----	80 mg/l
Iron-----	4.5 mg/l
Manganese-----	0.9 mg/l
Nitrate-----	0.1 mg/l as N.

Minimum treatment for removal of iron and manganese will be required. Hardness can be reduced by the addition of lime and other chemicals to any level normally accomplished in water treatment processes. The addition of lime for softening will also result in effective removal of iron and manganese.

IV. COST OF EXPLORATION.

Drilling was by Minnehaha Waters, Inc., P.O. Box 1011, Sioux Falls, South Dakota. The total cost of the exploration program follows:

Mobilization		\$ 500.00
Skunk Creek: Test Hole # 1 = 87'		
Big Sioux River: Test Hole # 1 = 57'		
" " # 2 = 42'		
" " # 3 = 25'		
" " # 4 = 31'		
" " # 5 = 47'		
" " # 6 = 50'		
" " # 7 = 52'		
" " # 8 = 97'		
" " # 9 = 59'		
541' @ \$6.00	3,246.00	
Observation Well & Sampling.....	200.00	
Production Test Well.....	2,000.00	
Test Pumping = 24 Hrs. @ \$30.00.....	720.00	
TOTAL COST.....	\$6,666.00	

D. C. Kalda, P. E.
 SCHWITZ, KALDA & ASSOCIATES
 HOSKINS-WESTERN-SCHDEREGGER, INC.

FIELD REPORT OF TEST HOLE

Name of Job Mamm Lake, Rural Route Test Hole No. 1
Address Black Creek, Ont. Depth 87'
Sec. 4-104-20 (Airport Highway) Date 11-19-73

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level. Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____
 Date _____ Driller Dennis P. Fisher

MINNEHAHA WATERS, INC.

FIELD REPORT OF TEST HOLE

Name of Job Minnehaha Community Station Test Hole No. 1
Address Big Sioux River Depth 57'
Sec. 29-104-49 Date Jan. 25, 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
Static Water Level _____ ft below ground level. Diameter of well _____ in.
Was well pumped _____ Yield _____ g.p.m. Water sample _____
Depth of screen setting _____ ft. Size of gravel used _____
Date _____ Driller C. D. Kirk

MINNEHAHA WATERS, INC.

FIELD REPORT OF TEST HOLE

Name of Job Minnehaha Community Station Test Hole No. 2
Address Big Sioux River Depth 42'
Sec. 29-104-49 Date Jan. 25 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.

Static Water Level _____ ft. below ground level. Diameter of well _____ in.

Was well pumped _____ Yield _____ g.p.m. Water sample _____

Depth of screen setting _____ ft. Size of gravel used _____

Date _____ Driver C. M. Clark

FIELD REPORT OF TEST HOLE

Name of Job Minehead Community Action Test Hole No. 3
Address Bty Sioux River Depth 251
Sec. 29-104-49 Date Nov. 26, 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level. Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____
 Date _____ Driller C. Black

MINNEHAHA WATERS, INC.

FIELD REPORT OF TEST HOLE

Name of Job Minnabe Community Water Test Hole No. 4
Address Big Sioux River Depth 31'
Sec. 29-104-49 Date June 26, 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level. Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____
 Date _____ Driller C. D. Dick

FIELD REPORT OF TEST HOLE[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level. Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____
 Date _____ Driller C. Black

FIELD REPORT OF TEST HOLE

Name of Job Upper Lake Community Water Test Hole No. 6
Address Big Sioux River Depth 50'
Sec. 29-104-49 Date Jan. 29, 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level. Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____

Date _____ Driller C. Blake

FIELD REPORT OF TEST HOLE

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
Static Water Level _____ ft. below ground level. Diameter of well _____ in.
Was well pumped _____ Yield _____ g.p.m. Water sample _____
Depth of screen setting _____ ft. Size of gravel used _____
Date _____ Driller C. Beck

FIELD REPORT OF TEST HOLE

Name of Job M. A. C. Community Water Test Hole No. 5
Address Big Sioux River Depth 77'
Sec. 29-104-39 Date Feb. 12, 74

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.

Static Water Level _____ ft. below ground level. Diameter of well _____ in.

Was well pumped _____ field _____ g.p.m. Water sample _____

Depth of screen setting _____ ft. Size of gravel used _____

Date _____ Driller A. B. G. L.

MINNEHAHA WATERS, INC.
FIELD REPORT OF TEST HOLE

Name of Job Minnehaha Community Station Test Hole No. 7
Address Big Sioux River Depth 59'
Sec. 29-104-49 Date Feb. 12, 1974

[illegible]

Size of Pit: Length _____ ft. Width _____ ft. Depth _____ ft.
 Static Water Level _____ ft. below ground level Diameter of well _____ in.
 Was well pumped _____ Yield _____ g.p.m. Water sample _____
 Depth of screen setting _____ ft. Size of gravel used _____
 Date _____ Driller A. B. G.

MINNEHAHA WATERS

PUMPING TEST

Name of Job Minnehaha Community Water
 Address 200 Sioux River
 Sec. 29-104-49

Well No. By test #2
 Date Feb. 11, 1944
 Static Level 10'

Depth 36'

Drawdown

Date	Hour	Orifice Reading	G.P.M.	Depth to Water	Drawdown	G.P.M./Ft.	Observer
9-11-74	9:35	14"	155	10'	0'	OB. WELL	
	9:40	14"	155	10' 9"	3' 9"	3' 1" 2"	
	9:43	14"	155	11' 6"	5' 1' 6"	3' 1' 4"	
	9:45	14"	155	12' 3"	5' 2' 3"	3' 1' 4"	
	9:50	14"	155	13'	5' 3'	3' 1' 4"	
	9:55	19"	182	13' 9"	5' 3' 9"	3' 1' 6"	
	3:00	19"	182	14' 6"	5' 4' 6"	3' 1' 6"	
	3:05	19"	182	15' 3"	5' 5' 3"	3' 1' 6"	
	3:10	19"	182	16'	5' 6'	3' 1' 6"	
	3:15	23"	201	16' 9"	5' 6' 9"	3' 1' 9"	
	3:20	23"	201	17' 6"	5' 7' 6"	3' 1' 9"	
	3:25	23"	201	18' 3"	5' 8' 3"	3' 1' 9"	
	3:30	30"	229	19'	5' 9'	3' 1' 11"	
	3:35	30"	229	19' 9"	5' 9' 9"	3' 1' 11"	
	3:40	30"	229	20' 6"	5' 10' 6"	3' 1' 11"	
	3:45	31"	234	21' 3"	5' 11' 3"	3' 1' 11 1/2"	
	3:50	31"	234	22'	5' 12'	3' 1' 11 1/2"	
	4:00	31"	234	22' 9"	5' 12' 9"	3' 1' 11 1/2"	
	4:15	31"	234	23' 6"	5' 13' 6"	3' 1' 11 1/2"	
	4:30	31"	234	24' 3"	5' 14' 3"	3' 1' 11 1/2"	
	4:35	33"	242	25' 6"	5' 15' 6"	3' 1' 11 1/2"	
	5:00	33"	242	26' 6"	5' 16' 6"	3' 1' 1/2"	
	5:50	33"	242	26' 10"	5' 16' 10"	3' 1' 1/2"	
	6:20	33"	242	26' 11"	5' 16' 11"	3' 1' 1/2"	
	6:50	33"	242	27' 1"	5' 17' 1"	3' 1' 1/2"	
	7:20	33"	242	27' 1"	5' 17' 1"	3' 1' 1/2"	
	7:50	33"	242	27' 1"	5' 17' 1"	3' 1' 1/2"	

Remarks

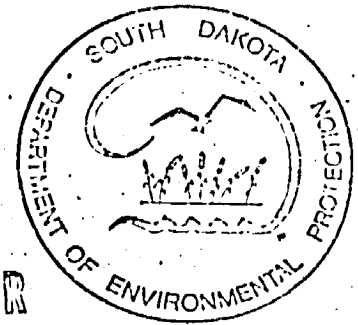
Date

Driller

EARTH BOUND

VOL. 1 NO. 3

SEPTEMBER



WATER POLLUTION... AND THE MUNICIPAL DISCHARGE

For many years, municipalities have been charged with polluting by discharging treated and untreated sewage into the lakes and streams of South Dakota. While many of the complaints were undoubtedly just, many were not. The real problem has always been a lack of hard facts because the municipalities rarely have the trained staff and equipment to analyze their discharge nor does the State have personnel necessary to routinely monitor them. Hopefully, this situation has now been corrected.

The U.S. Environmental Protection Agency is requiring each town to monitor the amount of pollution it is discharging. Since many towns cannot afford to hire a person to run the necessary tests and provide the needed laboratory equipment, the Department of Environmental Protection in cooperation with the Department of Health is offering to do the required testing for the towns at cost. For most small towns, this will be only \$40 per year. Based on the amount and frequency of the discharge, the actual fee may be more or less. The data gathered this way will be available to the public and will be used at all levels of government to detect potential problems, assess the need for new or expanded facilities, determine the need for additional training of plant operators and assess impact of the municipality on the lake or stream in relation to other pollutant sources. We hope the service will be a benefit to citizens of the State.

Towns wishing to participate in the program should contact: Duane Murphey, Department of Environmental Protection, Office Building No. 2, Pierre, South Dakota 57501.

DRINKING WATER— IS YOUR WATER SAFE TO DRINK?

A study in Aurora-Brule Counties has shown many rural people in those two counties with shallow wells or cisterns are drinking bacteriologically unsafe water. The study, funded by the U.S. Department of Health, Education and Welfare was carried out this past summer

by seven Mount Marty College biology students under the direction of two faculty members.

A total of 329 wells and 199 cisterns were sampled and tested for bacteria contamination, nitrate-nitrogen, total mineral content and total hardness. The study report is being completed and should be available during September or October. Bacteriological and nitrate-nitrogen study results from the five types of water supplies found were as follows:

SHALLOW WELLS (less than 100 feet deep) -

- 83 (69.2%) of 120 shallow wells were bacteriologically unsafe
- 60 (46.7%) of 122 shallow wells contained nitrate-nitrogen levels above 10 parts per million (ppm)

CISTERNS (hailed water)

- 55 (48.3%) of 114 cisterns were bacteriologically unsafe
- 1 of 111 cisterns contained water with nitrate-nitrogen above 10 ppm

CISTERNS (rain water from house roof)

- 67 (79.8%) of 84 cisterns supplied by rain water were bacteriologically unsafe
- 1 of 85 cisterns contained water with nitrate-nitrogen above 10 ppm

TUBULAR WELLS (200-300 feet deep)

- 7 (24.1%) of 29 wells were bacteriologically unsafe
- None of the 29 wells contained nitrate-nitrogen above 10 ppm

ARTESIAN WELLS (deeper than 800 feet)

- 31 (17.6%) of 176 artesian wells were bacteriologically unsafe
- None of the 178 artesian wells contained nitrate-nitrogen above 10 ppm

Although this is the first farm to farm drinking water study in South Dakota, based upon these results and bacteriological sampling information from other South Dakota counties, we suspect studies in other counties could yield similar results and substantiate the conclusion that better water supplies are needed for farms and ranches throughout South Dakota. Tubular and artesian wells are more likely to be bacteriologically safe, but the nitrate content is usually higher than for shallow wells.

MINNEHAHA COUNTY	TOTAL SAMPLES	TOTAL UNSAFE SAMPLES	%UNSAFE
1976 COLTON	0	0	
1977 COLTON	3	1	
1976 DELL RAPIDS	6	2	
1977 DELL RAPIDS	3	1	
1976 GARRETSON	1	1	
1977 GARRETSON	0	0	
1976 HARTFORD	1	0	
1977 HARTFORD	0	0	
1976 SIOUX FALLS	7	0	
1977 SIOUX FALLS	4	0	
TOTAL	25	5	20%

LINCOLN COUNTY	TOTAL SAMPLES	TOTAL UNSAFE SAMPLES	%UNSAFE
1976 CANTON	8	5	
1977 CANTON	2	1	
1976 FAIRVIEW	1	0	
1977 FAIRVIEW	1	0	
1976 HUDSON	2	1	
1977 HUDSON	5	3	
1976 LENNOX	6	3	
1977 LENNOX	3	0	
1976 WORTHING	0	0	
1977 WORTHING	1	1	
TOTAL	29	14	48%

State wide

FROM REACHES, PAGES, & LINES

MONTH	NO.	SATISFACTORY	UNSAFE	%			
1977 JANUARY	101	75	26				
FEBRUARY	92	73	19	UNSAFE	35	SAFE	65
MARCH	113	88	25	UNSAFE	21	SAFE	79
				UNSAFE	22	SAFE	78
TOTAL	306	236	70	UNSAFE	23%	SAFE	77%
APRIL	140	101	39	UNSAFE	28%	SAFE	72%
MAY	158	111	47	UNSAFE	30%	SAFE	70%
JUNE	142	87	55	UNSAFE	39%	SAFE	61%
TOTAL	440	299	141	UNSAFE	32%	SAFE	68%
JULY	166	105	61	UNSAFE	37%	SAFE	63%
AUGUST	197	116	81	UNSAFE	41%	SAFE	59%
SEPTEMBER							
TOTAL							

PRIVATE SAMPLES FROM RANCHES, FARMS, & HOMES FOR JULY, AUGUST & SEPTEMBER OF 1975

MONTH	NO.	SATISFACTORY	UNSAFE	%		
JULY	247	163	84	UNSAFE 34	SAFE 66	
AUGUST	233	153	80	UNSAFE 34	SAFE 66	
SEPTEMBER	221	126	95	UNSAFE 43	SAFE 57	
TOTAL	701	442	259	%	<u>37</u>	<u>63</u>

OCTOBER	199	127	72	UNSAFE 36	SAFE 64	
NOVEMBER	139	96	43	UNSAFE 31	SAFE 69	
DECEMBER	102	80	22	UNSAFE 22	SAFE 78	
TOTAL	440	303	137	%	<u>31</u>	<u>69</u>

1976 JANUARY	85	75	10	UNSAFE 12	SAFE 88	
FEBRAURY	79	70	9	UNSAFE 11	SAFE 89	
MARCH	130	110	20	UNSAFE 15	SAFE 85	
TOTAL	294	255	39	%	<u>13</u>	<u>87</u>

APRIL	175	137	38	UNSAFE <u>22</u>	SAFE <u>78</u>	
MAY	159	121	38	UNSAFE <u>24</u>	SAFE <u>76</u>	
JUNE	233	156	77	UNSAFE <u>32</u>	SAFE <u>68</u>	
TOTAL	567	414	153	%	<u>27</u>	<u>73</u>

JULY	251	150	101	UNSAFE <u>40</u>	SAFE <u>60</u>	
AUGUST	294	178	116	UNSAFE <u>39</u>	SAFE <u>61</u>	
SEPT.	154	86	68	UNSAFE <u>44</u>	SAFE <u>56</u>	
TOTAL	699	414	285	%	<u>41</u>	<u>59</u>

OCTOBER	186	120	66	UNSAFE <u>35</u>	SAFE <u>65</u>	
November	147	81	66	UNSAFE <u>45</u>	SAFE <u>55</u>	
December	90	65	25	UNSAFE <u>28</u>	SAFE <u>72</u>	
TOTAL	423	266	157	UNSAFE <u>37</u>	SAFE <u>63</u>	

PRIVATE SAMPLES FROM RANCHES, FARMS, & RANCHES FOR JULY 1974-JUNE 1975

MONTH	NO.	SATISFACTORY	UNSAFE	% UNSAFE	% SAFE
JULY	181	114	67	37	63
AUGUST	208	142	66	32	68
SEPTEMBER	171	98	73	43	57
OCTOBER	184	131	53	29	71
NOVEMBER	167	111	56	34	66
December	145	109	36	25	75
JANUARY	114	84	30	26	74
FEBRUARY	122	97	25	20	80
MARCH	167	128	39	23	77
APRIL	112	84	28	25	75
MAY	211	153	58	27	73
JUNE	248	174	74	30	70
TOTALS	2030	1425	605	30	70

Prior to July 1974 records for safe or unsafe samples were not broken down into months. Due to the concern for private water supplies we are now keeping records of samples for each month. Please find the total percentage of safe and unsafe samples for years July 1970-June 1974

Safe 61.2 %

Unsafe 38.8 %

231-3

WESTERN LABORATORIES

Materials Engineers

MAIL ADDRESS
P. O. BOX 80358
LINCOLN, NEBRASKA 68501

(402) 475-4241

OFFICE
825 J STREET
VERN J. DAMKROGER, P.E.
MANAGER

February 13, 1976

Minnehaha Community Water Corporation
Box 2000
Sioux Falls, South Dakota 57101

ATTENTION: Mr. Eric J. Hermanson, President

REFERENCE: Detailed Groundwater Study
Rural Water System
Treatment Plant Site
NE 1/4 S29 T104N R49W
Minnehaha County, South Dakota

Gentlemen:

At your request we have reviewed groundwater conditions, flood potential, and seepage expectations at the referenced site located about 2 miles south and 1 mile west of Dell Rapids, South Dakota. The purposes of this study were: (1) Assess groundwater and flooding effects on construction and performance of backwash water lagoons; (2) Assess effect of pumping on existing groundwater levels; (3) Analyze performance of the lagoons with regard to seepage losses.

Nine borings were drilled in the plant area and around lagoons numbered 1 and 4. The exact location and logs of these borings are presented in our Foundation Engineering Report of January 15, 1976.

A study of our logs of borings drilled at the end of June, 1975, revealed the following conclusions:

Table 1
Elevation in feet

Boring No.	Surface	Water Table	"Very Wet" Clay	Loader Excavation	Bottom of Clay	Quartzite
1	1470.9	1461.4	1464.9	1466	1464.9	1431.9
2	1470.6	1460.1	1462.6	1464	1468.6	1431.1
3	1470.1	1461.0	--	1467	1465.1	1432.1
4	1471.2	1460.4	--	1467	1467.2	1434.2
5	1470.3	1461.8	1466.8	1468	1463.3	--
6	1470.1	1461.1	1464.1	1465	1461.1	--
7	1469.5	1461.0	1467.0	1467	1459.5+	--
8	1470.3	1461.8	1463.3	1465	1461.8	--
9	1470.4	1461	1465.4	1467	1460.4+	--

CONSULTATION AND EVALUATION OF CONSTRUCTION MATERIALS

The loader excavation column is our estimation of the deepest excavation possible by front-end loader or scraper under conditions prevailing in late June 1975. All deeper excavation of clay would require backhoe or dragline. Higher ground-water levels would reduce the amount of material which could be excavated by loader or scraper. Note that under these conditions the excavation cannot be carried to elevation 1466 without stopping during July or August and scheduling a month of drying time before completing construction.

Operation of the lagoons will also require the scheduling of drying time during July and August to allow the sludge and one foot of soil below it to dry out to allow removal by loader. Consideration should be given to permanently filling lagoons and construction of a land-fill over them.

According to USGS and Corps of Engineers Data, the site is subject to flooding according to the following annual probabilities.

Table 2

<u>Annual Frequency</u>	<u>CFS</u>	<u>Elevation, Feet</u>
1%	61900	1472.4
2%	48600	1471.8
4%	31800	1471.3
10%	16600	1470.3
20%	9120	1468.0
43%	3200	1462.5 (Bank Full)
50%	2970	1462.0

Groundwater fluctuations under the site are roughly related to the above levels and frequencies because: (1) hydraulic connections with the river occur in some areas; (2) the same precipitation events which cause flooding can also raise the water table by local infiltration. However, groundwater does not necessarily respond quickly to changes in river stages except in close proximity with the channel.

Groundwater is expected to rise to the maximum yearly level in March, April, or May. It is expected to stay up for about 2 months and begin falling in the third Spring month. A drop of 2 to 5 feet is expected by September. The maximum expected groundwater elevation is a few inches to a foot below the ground surface. This limit is imposed by evaporation and transpiration losses.

The site can conveniently be divided into four groundwater provinces: (1) the treatment plant site; (2) area more than 600 feet from pumping wells; (3) areas 300 to 600 feet from pumping wells; and (4) areas closer than 300 feet from pumping wells.

The plant site is underlain by sand near the surface which is hydraulically connected to the channel of the Dells. Groundwater fluctuations in this sand are the same as the flood variations because of the close proximity to the river.

Our analysis of the aquifer capability shows that areas more than 600 feet away from a well are not significantly affected by pumping. Within the influence zone different assumptions for recharge were analyzed and assigned annual frequencies based on expected rainfall and flooding. These calculations are summarized in Table 3. The water table datum is assumed to be elevation 1461 feet, yield is assumed to be 210 GMP, and transmissability is assumed to be 20,000.

Table 3
Water Table Elevation in Feet
at Distance From Pumping Well.

<u>Annual Frequency, %</u>	<u>1000'</u>	<u>600'</u>	<u>300'</u>	<u>100'</u>	<u>50'</u>	<u>5'</u>
10	1470	1468	1467	1464	1462	1457
25	1466	1465	1463	1461	1459	1453
50	1461	1460	1458	1456	1454	1448

Note that the area most effected by pumping is within 300 feet of the well. Areas 300 to 600 feet away are moderately effected. Most of the lagoon areas are located within this zone. We expect that a lagoon will assume the level of groundwater at the point closest to the well. Thus with the design layout the maximum groundwater level in any lagoon will be 1468 feet elevation, since all the lagoons have portions of their area within 600 feet of a pumping well.

The effect of pumping during dry years was also analyzed. Dry years reduce or eliminate recharge from precipitation and the river. The worst case analyzed (1% Annual Frequency) assumed 2 years of pumping with no recharge. The results of these computations are summarized in Table 4.

Table 4
 Water Table Elevation in Feet
At Distance From Pumping Well

<u>Annual Frequency, %</u>	<u>5000'</u>	<u>1000'</u>	<u>600'</u>	<u>300'</u>	<u>100'</u>	<u>50'</u>	<u>5'</u>
50		1461	1460	1458	1456	1454	1448
25		1458	1457	1455	1453	1451	1445
10		1456	1455	1453	1450	1449	1444
1	1456	1454	1453	1451	1448	1447	1442

The well field is designed to spread out the discharge load and minimize the lowering of the water table. Under existing conditions the well field is suitable for the .3 to .65 mgd design yield. Future expansion of the Sioux Falls well field and increased irrigation will limit production. Analysis of the ultimate limit of the aquifer is outside the scope of this report.

Permeability tests were performed on three undisturbed samples obtained in the lagoon area during the foundation investigation. The results of this testing is summarized in Table 5.

Table 5

<u>Boring No.</u>	<u>Sample No.</u>	<u>Depth, ft.</u>	<u>Permeability cm/sec.</u>
9	18	5.1-5.8	9.9×10^{-6}
7	14	5.1-5.5	5.4×10^{-7}
5	9	4.2-4.8	1.6×10^{-7}

A permeability test was performed on typical lime sludge material which was settled in water prior to testing to simulate lagoon bottom conditions. This material was found to have a permeability of 1.6×10^{-5} which is more permeable than the natural soils. It will therefore not affect seepage.

The clay soils represented by the undisturbed samples will allow the following seepage rates at the location of the borings, based on a 3 foot head.

<u>Boring No.</u>	<u>Sample No.</u>	<u>Seepage Rate From Lagoon Inches Per Day</u>
9	18	1/2
7	14	1/32
5	9	Negligible

Minnehaha Community Water Corporation
Sioux Falls, South Dakota 57101

February 13, 1976
Page five

Sample 18 is the most permeable clay soil represented by the borings and probably occurs in small areas throughout the site. The clay soils of the site will probably have a permeability similar to sample 14 when they are properly reworked and compacted.

We recommend that the lagoon bottom subgrades be inspected to detect sandy spots and to perform percolation tests. Any sandy soils should be removed and a compacted clay liner constructed in these areas. Permeable clays should be scarified and recompacted to reduce seepage losses to acceptable values.

If you have any questions concerning this report please contact us at your convenience.

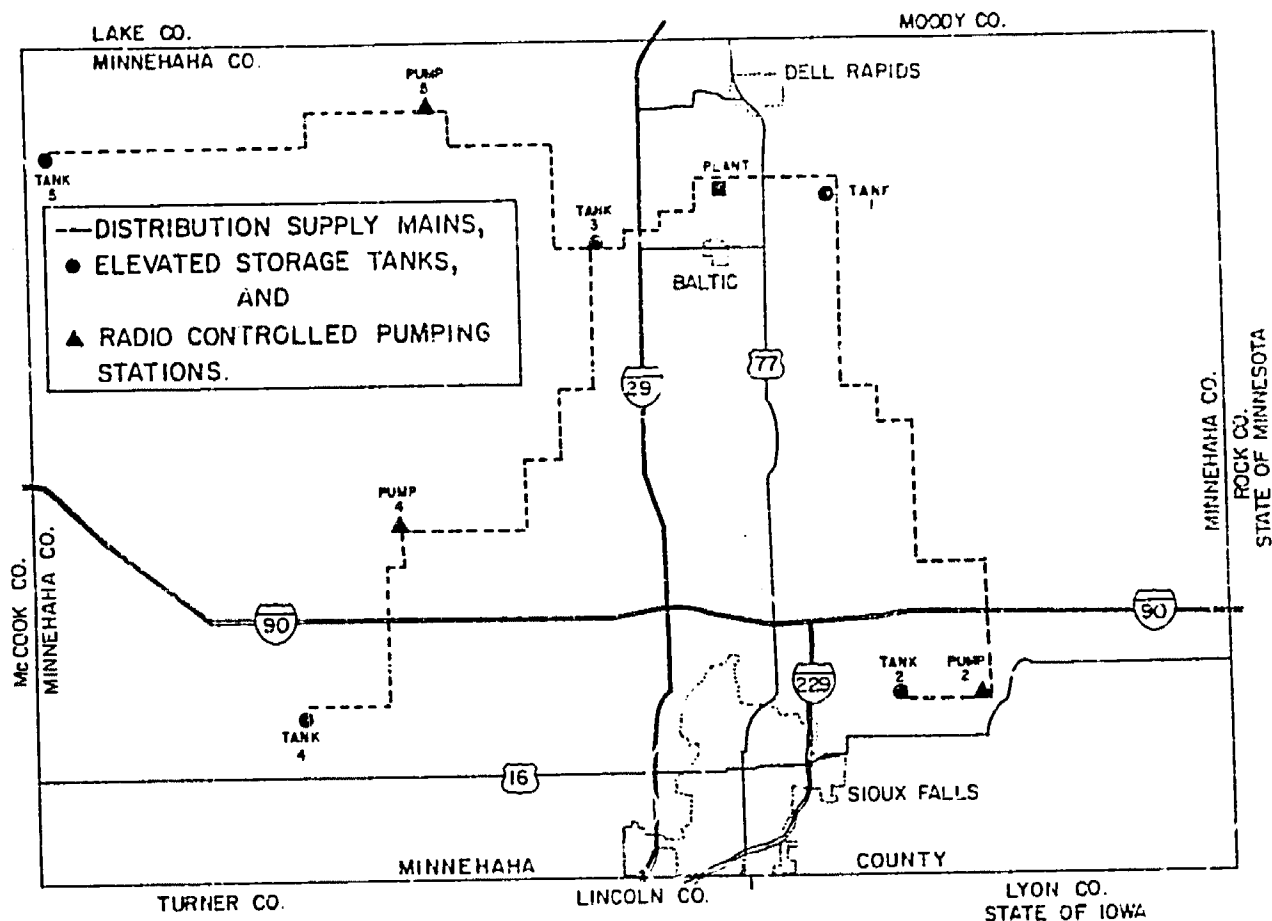
Very truly yours,

WESTERN LABORATORIES

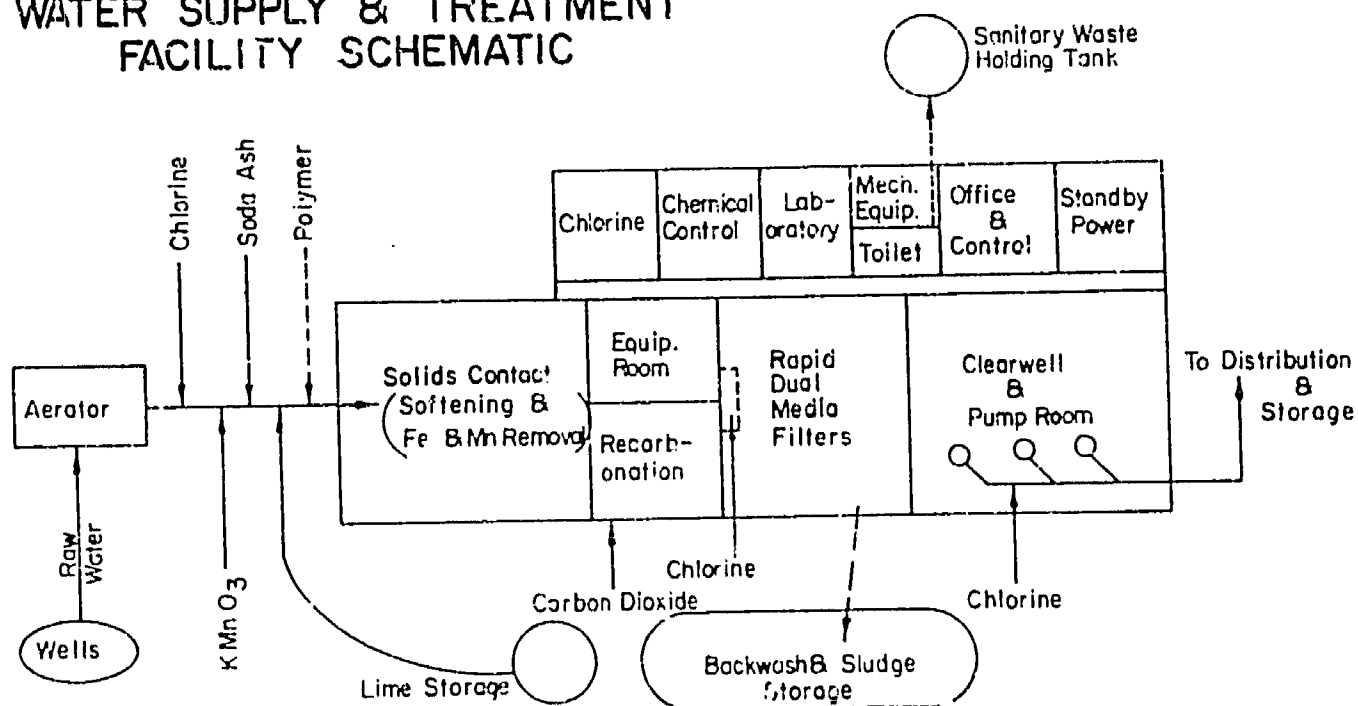
By: David W. Thomssen
David W. Thomssen

DWT/caw

Or. & 2 cc. Minnehaha Community Water Corporation
1 cc. Don Bogg - DEP
1 cc. County Supervisor FmHA Sioux Falls, South Dakota
1 cc. State Director, Huron, South Dakota
1 cc. Water Rights Commissioner, Pierre, South Dakota
1 cc. Schmitz, Kalda, & Associates Attn: Mr. Don Kalda
1 cc. Hoskins-Western-Sonderegger Attn: Mr. Dean Connett



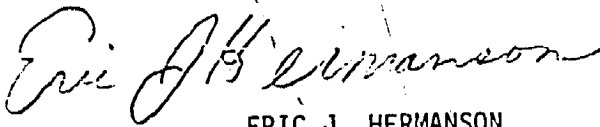
WATER SUPPLY & TREATMENT FACILITY SCHEMATIC



MINNEHAHA COMMUNITY WATER, CORP.

BOX 2900
SIOUX FALLS, SOUTH DAKOTA 57101
605-339-9620

The Board of Directors of the Minnehaha Community Water Corporation welcomes and invites you to tour our water treatment plant. As we near completion of our project, we are anxious to start providing adequate quantities of good quality water to our system members.



ERIC J. HERMANSON
President

Statistics

2311-3

- Five 175 GPM Wells
- One MGD - Water Treatment Facility
- Five Elevated Storage Tanks (total Capacity 530,000 gallons)
- 650 miles of 2" through 10" Water Distribution System
- Over 1500 individual meters
- Over 400 future service meters
- Town of Crooks, South Dakota
- Three Booster Pumping Stations controlled by Fri radios with tank level reports to the central control unit which automatically starts and stops all pumps.

Financed By: Farmers Home Administration - United States Department of Agriculture

Contractors:

Distribution: Western Mechanical Contractors - Topeka, Kansas
Pumps: Sheesley Plumbing and Heating - Mitchell, South Dakota
Elevated Tanks: Universal Tank and Iron Works - Indianapolis, Indiana
Meters: Badger Meter Company - Milwaukee, Wisconsin
Water Treatment: Bushman Construction Company - St. Joseph, Missouri
Wells: Thorpe Well Company - Ankeny, Iowa

Attorneys:

Allen B. Brown
Richard F. Staley

Engineers:

Hoskins-Western-Sonderegger, Inc. - Lincoln, Nebraska
Schmitz, Kalda and Associates - Sioux Falls, South Dakota



Welcome to

Minnehaha Community Water Corporation
Sioux Falls, South Dakota
Rural Water System

National Rural Water Association Annual Meeting - September 12 & 13, 1977

Officers and Directors

Eric J. Hermanson, Pres.
Donald Hentges, V. P.
Raymond F. Aljets
Juden A. Peterson
Rayburn Butrum
Dr. Bryson McHardy

Elmer Haugen, Jr., Sec.
Vern Oakland, Treas.
Wilbur Mielke
Arthur Rave
Don Tollefson
Don Pusch
Arthur Meyer (dec.)

File in
N.S. 2311-3

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION
Post Office Box 821
Huron, South Dakota 57350

August 18, 1977

SD Dept. of Natural Resource Development
Joe Foss Building
Pierre, South Dakota 57501

RECEIVED

AUG 19 1977

RE: SOUTH LINCOLN COUNTY RURAL WATER SYSTEM &
MINNEHAHA COMMUNITY WATER CORPORATION

DEPT. OF NATURAL
RESOURCE DEVELOPMENT

Gentlemen:

As you have no doubt heard, the Secretary of Agriculture, our new Administrator, our Acting State Director, and our Minnehaha County Supervisor are defendants in a suit brought by the Sierra Club. We attach a copy of the Summons, Complaint, and Interrogatories.

Discussions with our Regional Attorney's office and with attorneys working with the Office of General Counsel in Washington indicate they suspect these particular rural water systems have been selected as a potential test case on a national scale. The Sierra Club implies that FmHA, in spite of hundreds of loans being made, has prepared environmental impact statements in only two instances. This implication is correct and, as you can well imagine, our National Office is deeply concerned that a successful action by the Sierra Club in this instance may push us and our applicants into the position of preparing costly and time-consuming environmental impact statements on a broad variety and possibly all major FmHA-financed water and waste projects.

We have generally felt that the benefits derived from our water and waste programs are so fundamental and essential that full-blown environmental impact statements are unnecessary. Almost invariably our projects are under careful scrutiny of appropriate state, federal, and local regulatory agencies and are subjected to clearance from local and area-wide planning and development districts.

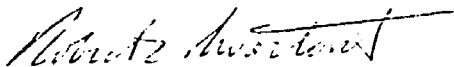
*Farmers Home Administration is an Equal Opportunity Lender.
Complaints of discrimination based on race, sex, religion,
national origin or marital status should be sent to:
Secretary of Agriculture, Washington, D. C. 20250*

SD Dept. of Natural Resource Development
Page 2

Our purpose in writing you and providing the attached material is to garner documentary evidence that the adequacy of the Big Sioux Aquifer to support this system was thoroughly considered by FmHA and our applicant corporation prior to the time we started construction. You will note we are sending a copy of this letter and related material to Duncan McGregor so that he can search his files. We can distinctly recall oral, telephone, and written contacts at the time we were attempting to determine proper well locations for the Minnehaha system. We are still in the process for the South Lincoln County Rural Water System in determining just where a suitable water supply may be found and we are also aware that John Madden of DeWild, Grant, Reckert & Associates is working closely with Mr. McGregor in this endeavor.

Please provide us with any material you feel could be helpful. We will transmit this material to our FmHA attorneys and to the attorneys serving the rural water systems under suit. Any help you give us in this direction will be greatly appreciated.

Sincerely,



ROBERT C. SWARTOUT
Chief, Community Programs

Attachment

cc Duncan McGregor, State Geologist
County Supervisor, FmHA, Sioux Falls, SD

United States District Court

FOR THE

DISTRICT OF SOUTH DAKOTA

CIVIL ACTION FILE NO. 0000-4000

SIERRA CLUB, a non-profit California corporation,

Plaintiff

v.

SUMMONS

GORDON CAVANAUGH, individually and as Administrator, Farmers Home Administration; MAURICE McLINN, individually and as South Dakota Director of Farmers Home Administration; RONALD L. WALKER, individually and as Minnehaha and Lincoln Counties, South Dakota, County Supervisor; BOB S. BERGLAND, individually and as Secretary, Department of Agriculture of the United States; ~~MINNEHAHA~~ MINNEHAHA COMMUNITY WATER CORP., and SOUTH LINCOLN RURAL WATER SYSTEM, INC., non-profit South Dakota corporations.

To the above named Defendant :

Defendants.

BOB S. BERGLAND, as Secretary, Department of Agriculture of the U.S.
You are hereby summoned and required to serve upon JOHN N. GRIDLEY, III,

plaintiff's attorney, whose address is Suite 422, 101 South Main, Sioux Falls, South Dakota 57101

an answer to the complaint which is herewith served upon you, within 60 days after service of this summons upon you, exclusive of the day of service. If you fail to do so, judgment by default will be taken against you for the relief demanded in the complaint.

WILLIAM J. SRSTKA

Clerk of Court.

NANCY AUNE

Deputy Clerk.

Date: July 25, 1977

[Seal of Court]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH DAKOTA
Civil Action No. 01-99-4042

SIERRA CLUB, a non-profit California
corporation,

Plaintiff,

vs.

GORDON CAVANAUGH, individually and as
Administrator, Farmers Home Administra-
tion; MAURICE McLINN, individually and
as South Dakota Director of Farmers
Home Administration; RONALD L. WALKER,
individually and as Minnehaha and
Lincoln Counties, South Dakota, County
Supervisor; BOB S. BERGLAND, individu-
ally and as Secretary, Department of
Agriculture of the United States; MINNE-
HAHA COMMUNITY WATER, CORP., a non-
profit South Dakota corporation; and
SOUTH LINCOLN RURAL WATER SYSTEM, INC.,
a non-profit South Dakota corporation,

Defendants.

VERIFIED COMPLAINT

I. INTRODUCTION

1. This is a civil suit for injunctive and declaratory relief, relief in the nature of mandamus, and for other relief as specified based upon violations of the National Environmental Policy Act (hereinafter "NEPA"), 42 U.S.C. §§4321 et seq. Plaintiff's claims involve the failure of the Farmers Home Administration (FmHA) as an agency of the United States Department of Agriculture to make or require environmental impact statements upon the consideration and/or approval of multi-million dollar loans making possible rural community water systems in Minnehaha and Lincoln Counties, South Dakota (hereinafter called "the projects").

II. JURISDICTION

2. This court has jurisdiction over this action under 28 U.S.C. §1331(a) (civil action arising under the laws of the United States); 28 U.S.C. §2201-02 (declaratory judgment).

3. The amount in controversy exceeds the value of \$10,000, exclusive of interest and costs.

4. Venue is properly laid in this court under 28 U.S.C. §1391.

III. PARTIES

5. Plaintiff Sierra Club ("the Club") was founded in 1892 and is a non-profit corporation organized and existing under the laws of the State of California with its principal place of business in the City and County of San Francisco, State of California. The Club is a national conservation organization having approximately 170,000 members. The stated corporate purposes of the Club are:

"To enhance and protect by all lawful means the natural resources and human environment of the United States and the earth in general; to explore, enjoy, and preserve the scenic resources of the United States and its forests, waters, wildlife, and wilderness; to undertake and to publish scientific, literary, and educational studies concerning them; to educate the people with regard to the national and state forests, parks, monuments, and other natural resources of especial scenic beauty and to enlist public interest and cooperation in protecting them."

The Dacotah Chapter of the Sierra Club, consisting of approximately 335 members, includes the States of North and South Dakota, and is headquartered in Rapid City, South Dakota. Members of the East River Group of the Dacotah Chapter, headquartered in Sioux Falls, South Dakota, live and work in the geographical areas to be affected by the projects. The aesthetic and conservational interests of the Club and its members will be adversely affected and injured by the refusal of the defendants herein to fulfill their statutory duties as is more fully alleged below. The ability of Club members and others to maintain the life style afforded by an agrarian-rural setting, with its inherent cultural values, will be severely and permanently disrupted by the failure of the projects to provide or require land-use planning; by the failure to implement protective and mitigative measures to avoid substantial impacts on the ecology of the areas affected by the projects, including impacts on vegetation

and wildlife; by the failure to impose those controls necessary or advisable whereby water uses and quality shall be regulated in an environmentally compatible and sound manner; by the failure to explore land-use alternatives to minimize impacts on prime agricultural lands. Plaintiff Sierra Club brings this action in furtherance of the above purposes and on behalf of its members.

6. The Board of Directors of the Sierra Club has adopted a policy on agriculture which declares, inter alia:

"Agriculture--the raising of plants and animals for food and fiber--is an essential human activity. Its use of land, water, energy and other resources merits high priority, but its impacts on these resources are many and distribution of its benefits far from equitable. We must strive for an equitable and sustainable balance between human population and agricultural supply.

A. Goals: Agriculture must be carried out in an environmentally sound manner which:

1. Protects land, soil and water resources and maintains their long-term productivity.
2. Conserves wilderness and other natural land and aquatic ecosystems. . . .
8. Promotes long-term, stable associations of those who raise crops with the lands upon which their livelihood is based.

B. Land Use: Two trends are of intense concern: The Loss of productive agricultural land to urban, industrial and mining development and the conversion of marginal lands and undeveloped areas to agricultural use.

C. Water: Agricultural use of water is of critical concern both quantitatively and qualitatively.

1. A comprehensive water allocation policy is necessary in many regions to balance finite supplies between the needs of agriculture, industry, municipalities, recreation and ecosystem maintenance. . . .
3. Use of water for any purpose should not result in undue loss of aquatic ecosystems, adverse effects on ground water, or construction of storage and conveyance projects whose total social, economic and environmental costs exceed their benefits to society. . . .
7. Public irrigation water projects should be accountable for their full social, economic and environmental costs and these costs, in general, should be fully reflected in the price of the water to

the irrigators. Subsidies are not per se objectionable to the extent they are used to advance specific public policy goals and are explicitly acknowledged."

7. Defendant Maurice McLinn is South Dakota's State Director of FmHA with offices in Huron, South Dakota. Defendant McLinn has supervisory authority for FmHA activities in the State of South Dakota, including Minnehaha and Lincoln Counties. His predecessor Archie Gubbrud (hereinafter "Director Gubbrud") has made a determination that an environmental impact statement is not required for the actions by FmHA in South Dakota regarding the projects.

8. Defendant Ronald L. Walker is County Supervisor of FmHA with offices in Sioux Falls, South Dakota. Defendant Walker has authority and responsibility for FmHA activities in Lincoln and Minnehaha Counties, South Dakota. He is responsible for preparing environmental impact assessments for projects within his counties of responsibility.

9. Defendant Gordon Cavanaugh is Administrator of FmHA with offices in Washington, D.C., and has the overall responsibility for conduct, operations, and activities of the FmHA.

10. Defendant Bob S. Bergland is Secretary of the Department of Agriculture of the United States with offices in Washington, D.C., and is responsible for the overall administration and direction of units and agencies of the Department of Agriculture, including FmHA.

11. Defendant Minnehaha Community Water, Corp. (hereinafter "MCWC") is a non-profit South Dakota corporation with its principal place of business in Sioux Falls, South Dakota.

12. Defendant South Lincoln Rural Water System, Inc. (hereinafter "SLRWSI") is a non-profit South Dakota corporation with its principal place of business in Canton, South Dakota.

13. All defendants except MCWC and SLRWSI are hereinafter referred to as "(the) governmental defendants."

IV. GENERAL ALLEGATIONS

14. The FmHA as an agency of the Department of Agriculture administers the powers granted by Congress to the Secretary of Agriculture to make or insure loans under 7 U.S.C. §1926 for water and waste facilities ". . . primarily serving farmers, ranchers, farm tenants, farm laborers, and other rural residents. . ."

15. The two projects contemplated herein are rural community water systems called the Minnehaha Rural Community Water System (hereinafter "MRCWS") to be owned and operated by defendant MCWC and the South Lincoln Rural Water System (hereinafter "SLRWS") to be owned and operated by defendant SLRWSL.

16. Plaintiff contends that the projects are controversial and will be accompanied by potential environmental impacts which are severe, adverse, irreparable and substantial, requiring their fullest evaluation, including assessment through an environmental impact statement. The major environmental intrusions suggested by each project are:

- a. The stimulation of uncontrolled and environmentally debilitating rural sprawl development including "leap-frogging" subdivisions;
- b. A requirement of the use of water in short or critical supply; also, threats to the quality of the ground water system;
- c. Waste disposal problems and waste hazards; and
- d. The taking and/or stimulation for conversion of prime agricultural lands.

17. According to a document called "Land Inventory and Monitoring Memorandum" dated October 15, 1975 and issued under the authority of the Soil Conservation Service of the United States Department of Agriculture, prime farmland is defined as follows:

"Prime farmland is land best suited for producing food, feed, forage, fiber, and oil seed crops, and also available for those uses (the land could be crop land, pasture land, range land, forest land, or other land but not urban built up land or water). It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically

when treated and managed, including water management, according to modern farming methods."

By applying that definition, according to calculations made by the Land Resource Information Section of the South Dakota State Planning Bureau, 45% of Minnehaha County is prime farmland and 63.9% of Lincoln County is prime farmland.

18. According to figures obtained from FmHA by plaintiff, for the fiscal year ending in 1976, FmHA was involved in 1151 water project loans costing \$361,216,787; 435 waste disposal loans totalling \$1,800,000; and 87 combined water and waste disposal loans totalling \$47,124,600, or a total of 1673 project loans, involving a total of \$410,141,387. In addition, there were during the same period grant programs whereby there were 709 water project grants totalling \$145,128,060; 236 waste disposal grants totalling \$65,013,900; there were 41 combined grants totalling \$13,640,200. These figures combine for a total of 2659 loans and grants during the past fiscal year totalling \$633,923,547, all being issued under the statutory authority granted to FmHA.

19. According to statistics obtained by the Council on Environmental Quality, which is charged with the responsibility for maintaining such information, since environmental impact statements became required by law, on or about January 1, 1970, FmHA had completed but one final environmental impact statement, in March of 1972 concerning a rural water system in Hospers, Iowa. Additionally, the FmHA has one draft environmental impact statement in progress on a water project in Cape Hatteras, North Carolina.

A. THE MINNEHAHA PROJECT

20. The MRCWS is supposed to facilitate the water supply to rural Minnehaha County and adjacent areas including, tentatively, the towns of Baltic, Corson, Dell Rapids, Hartford and Humboldt. The original plans called for serving an estimated 1600 rural and 1010 town users. The anticipated development cost of the necessary

facilities for MRCWS of \$6,000,000 is being supplied by FmHA to a substantial degree in the form of a \$5,500,000 loan. The loan agreement places no restrictions on the types of users who may subscribe to the rural water system. Accordingly, MCWC claims unfettered discretion whether to permit bulk subscribers, and has stated a policy to solicit and accept bulk user subscriptions. That policy stimulates unregulated subdivision growth, in this case outside the three-mile regulatory impact of and from the City of Sioux Falls, South Dakota. On information and belief, the MRCWS has capacity for 1800 service connections; as of November 1976, 480 connections had been sold to non-farm residential units in subdivisions scattered throughout Minnehaha County, while approximately 400 additional scattered individual non-farm units have been sold subscriptions. Those and similar sales stimulate rural sprawl. Potential environmental impacts accompanying such stimulation include urban out-migration, central city containment which hampers or curtails orderly growth, and threats of environmental degradation caused by service inefficiencies resulting from low density housing patterns.

21. The MRCWS may well significantly deplete available ground water. The Big Sioux aquifer which MRCWS will use as its source of water is presently being used by the City of Sioux Falls, and the towns of Dell Rapids and Baltic as well as rural residents in the same area. In addition, water rights for irrigation purposes have been granted from the aquifer. The United States Geological Survey has concluded, using analogue modeling methods, that the maximum sustained yield of the Big Sioux aquifer under adverse conditions is between 18 and 24 million gallons per day (mgd). According to Sioux Falls Water Department projections, Sioux Falls water use alone may reach 24 mgd in approximately 12 years. Additional demands placed on the aquifer as a result of the MRCWS will either hasten the time when Sioux Falls must obtain alternative water resources, or will create substantial questions, perhaps unresolvable, concerning the availability of water in the area serviced by the system, or both.

22. The MRCWS may contribute to a significant degradation of the ground water. It has been demonstrated that the unregulated growth of subdivisions and communities using septic tanks for waste disposal will cause or threaten an increase in nitrate concentrations in the ground water used as the primary water supply source for area residents.

23. The environmental impacts of the MRCWS are highly controversial. Representatives of the City of Sioux Falls have publicly disputed conclusions that the system would not require the use of water in short or critical supply and that the project would not result in an undesirable housing development pattern. The Regional Administrator of Region VIII of the Environmental Protection Agency, John Green, has expressed the opinion that an EIS should have been prepared by FmHA prior to the granting of the loan for the construction of the MRCWS.

24. The maximum area serviceable by MRCWS contains vast parcels which have been determined as prime farmland. Substantial portions of that land are threatened by conflicting or alternative land-use patterns made feasible through the existence of the MRCWS.

25. On information and belief, the construction of the MRCWS began in March of 1976, with the well and five water towers now substantially completed; overall, approximately one half of the MRCWS is now finished.

26. On or about December 15, 1972 an Environmental Impact Assessment for the MRCWS as then proposed was submitted to Director Gubbrud by defendant Walker. The document concluded, among other things, that the project would not require the use of water in short or critical supply, would not generate a waste disposal problem, and would not cause undesirable housing development patterns. Based in part on the document, Director Gubbrud determined on or about March 5, 1973 that an environmental impact statement was not needed. The full impact of a decision by MCWC to accept and solicit bulk user subscriptions,

particularly the potential number of subscribers, was unknown at the time the assessment document was prepared. Thus, critical environmental impacts associated with the granting of the loan to MCWC by FmHA were not evaluable at the time the impact assessment document was prepared and reviewed and available for public consumption.

B. THE SOUTH LINCOLN PROJECT

27. An additional rural community water system is being planned for the southern half of Lincoln County, South Dakota, to be called the South Lincoln Rural Water System (hereinafter "SLRWS"), under the ownership and operation of defendant SLRWSI. Through its estimated 600 service connections, the system is expected to serve rural farm and non-farm people in towns within the service area, including the towns of Lennox, Canton and Alcaster. Application has been made to the FmHA for a loan covering \$2,880,000 of the estimated total development cost of \$3,000,000. According to the latest information available to the plaintiff, final approval of the application has not been made.

28. On information and belief, it is anticipated that the loan agreement if finalized will place no restrictions on the types of users who may subscribe to the rural water system. Accordingly, SLRWS will be able to claim unfettered discretion whether to permit bulk subscribers, and will try to adopt a policy to solicit and accept bulk user subscriptions. That policy will stimulate unregulated subdivision growth, and the accompanying deleterious environmental consequences. Potential environmental impacts accompanying such stimulation include out-migration, central city containment which hampers or curtails orderly growth, and threats of environmental degradation caused by service inefficiencies resulting from low density housing patterns.

29. On or about December 12, 1976 an environmental impact assessment for the SLRWS was submitted to Director Gubbrud by defendant

Walker. The document concluded, among other things, that the project would not require the use of water in short or critical supply, the project would not generate a waste disposal problem, and the project would not cause an undesirable housing development pattern. Based in part on the evaluation made in the assessment document, Director Gubbrud determined on or about October 18, 1976 that an environmental impact statement would not be needed for the SLRWS. However, in a document attached to the aforesaid environmental impact assessment, Director Gubbrud stated a recognition that unfavorable housing patterns would in fact be created by existence of wide-spread pipeline systems. He also recognized secondary effects on school financing, road maintenance, municipal growth and crop and resource development caused by the existence of the SLRWS.

30. The issues surrounding the SLRWS including those of environmental impact are highly controversial; opposition to the construction of the project without adequate environmental protections, including those against urban sprawl, have been expressed in public meetings on the matter, attended and participated in by concerned citizens, including those who are members of the Sierra Club.

31. The maximum area serviceable by SLRWS contains vast parcels which have been determined as prime farmland. Substantial portions of that land are threatened by conflicting or alternative land-use patterns made feasible through the existence of the SLRWS.

32. The SLRWS may contribute to a significant degradation of the ground water. It has been demonstrated that the unregulated growth of subdivisions and communities using septic tanks for waste disposal will cause or threaten an increase in nitrate concentrations in the ground water used as the primary water supply source for area residents.

*require more study, possibly
of water quality, as to be
properly evaluated
into the whole
into-10-*

3

*should consider the effects from existing household
water, can water from roads, bacteriologically unsatisfactory
poor chemical quality of local supplies. This is main
reason for Rural Water System.*

33. Paragraphs 1 through 32 hereinabove are incorporated herein and made a part thereof by reference.

34. The National Environmental Policy Act (NEPA), 42 U.S.C. §4321, et seq., recognizes the profound impact of man upon the environment. Accordingly, NEPA requires all agencies of the federal government to implement "all practicable means, consistent with other essential considerations and national policy to improve and coordinate Federal plans, functions, programs and resources" so as to "fulfill the responsibilities of each generation as trustee of the environment for succeeding generations," and to thereby "attain the widest range of beneficial uses of the environment without degradation," and to "maintain, wherever possible, an environment which supports diversity and variety of individual choice." See 42 U.S.C. §4331.

35. To effectuate the aforesaid policies, §§102(2) of NEPA, 42 U.S.C. 4332(2)(c) requires that all agencies of the federal government:

"include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on--

- (i) the environmental impact of the proposed action;
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented;
- (iii) the alternatives to the proposed action;
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."

36. The term "federal action" as contemplated in §102 of NEPA is deemed to include "projects and continuing activities . . . supported in whole or in part through federal . . . loans or other forms of funding assistance." See the Guidelines of the President's Council on Environmental Quality (CEQ), 36 Fed.Reg. 7724 (April 23, 1971) and 38 Fed.Reg. 20550 (August 1, 1973).

37. As required by law, the FmHA has promulgated regulations in 7 C.F.R. §1824.1, which contemplate when an environmental impact statement is required to be prepared in connection with a community water system loan:

"(1) The environment may be significantly affected by the proposed major FmHA action, even though such action may be localized in its impact;

(2) It is reasonable to assume a cumulatively significant impact on the environment from successive implementation of several similar actions;

(3) A decision involving a limited expenditure is a precedent for action in much larger cases;

(4) Environmental impact of a proposed action is likely to be highly controversial; . . .

(7) The project would contribute to a significant depletion or degradation of ground or surface water; . . .

(12) The project would significantly change industrial, commercial, or residential concentrations or distributions." 7 C.F.R. §1824.4(B) (1976).

38. The Secretary of the United States Department of Agriculture has recently articulated Department policy regarding the conversion of prime farmland to other uses. A document called "Statement of Prime Farmland, Range, and Forest Land," Secretary's Memorandum No. 1827, Supplement 1, June 21, 1976, a true copy of which is attached hereto as Exhibit A, recognizes:

"The continued loss of lands well suited to the production of food, forage, [and] fiber, . . . and the degradation of the environment resulting from those losses is a matter of growing concern to the Nation. . . .

"Land-use alternatives are generally available that can minimize impacts on prime lands. Such alternatives should be explored carefully, particularly where Federal funds are involved. When possible, land-use decisions should be avoided which irrevocably commit prime lands to non-farmland [and] non-range . . . uses, thereby foreclosing the options of future generations. . . ."

The aforesaid USDA Memorandum directs agencies within the Department of Agriculture to:

"(1) Advocate the protection of prime lands from premature or unnecessary conversion to other land uses. Priority will be given to prime lands threatened by conversion to irreversible land uses;

(2) Assure that environmental impact statement procedures and review processes thoroughly consider and evaluate the impact of major Federal actions on prime farmland, range and forest lands; . . .

(5) USDA agency actions and programs will give thorough consideration to the local, State and national concerns for the retention of prime lands. The necessity of conversion of these lands to other uses will be considered only after a determination that feasible alternatives do not exist or that overriding public needs warrant the action."

39. The USDA position on the importance of environmental impact assessments to preserve prime farmland is supported by the President's Council on Environmental Quality in its "Analysis of Impacts on Prime and Unique Farmland in Environmental Impact Statements," CEQ Memorandum, August 30, 1976, requiring federal agencies:

" . . . to determine the existence of prime and unique farmlands in the areas of impact analyzed in environmental impact statements prepared in compliance with Section 102(2)(C) of the NEPA. This should include threats to the continued use and viability of these farmlands not only from direct construction activities, but also from urbanization or other changes in land use that might be induced by the Federal action."

40. The activities of the governmental defendants in granting a loan to finance the construction of MRCWS and in considering the grant of a loan to finance the SLRWS constitute "major federal action[s] significantly affecting the quality of the human environment" within the meaning of §102(2)(C) of NEPA.

41. The governmental defendants have failed, inter alia, to use " . . . all practicable means . . . to improve and coordinate (the rural community water system programs) . . . to attain the widest range of beneficial uses of the environment without degradation . . ."; they have failed as the responsible officials to issue a "detailed statement" on the projects accounting for the impacts, alternatives, comparisons of use against long-term productivity, and the costs in terms of unrecoverable resources; they have failed to obey their own regulations or when the FIS processes are required; they have failed to follow the CEQ recommendations on determining the existence of prime and unique farmlands as part of NEPA compliance; they have

failed to follow Department of Agriculture policy of avoiding the loss of prime farmland, advocating their protection, and assuring such a mandate through full EIS and other environmental review processes. The granting or consideration of loans on the projects by FmHA without such compliance is unlawful.

42. The failure to make or require a "detailed statement" on each of the projects, and the failure to require full environmental review, as alleged aforesaid, constitutes a failure by the governmental defendants to perform a non-discretionary duty which is required of them.

43. By virtue of the aforesaid, the governmental defendants have violated and continue to violate NEPA, the 1971 and 1973 Guidelines of the CEQ on environmental impact statements, and the FmHA regulations on the requirements of impact statements. Such actions on the part of said governmental defendants are unlawful, arbitrary, capricious, and amount to actions on their part outside of and without lawful authority. As a result of these illegal actions, plaintiff and its members are and will be grievously and irreparably harmed and injured.

44. Unless defendants are enjoined and restrained from violating or continuing to violate their statutory duties as alleged herein, plaintiff will suffer severe and irreparable injury, for which they will have no adequate remedy at law.

45. There is an actual and continuing controversy between plaintiff and defendants herein which is appropriate for declaratory, injunctive and other relief.

WHEREFORE, plaintiff prays for judgment as follows:

(1) For a Declaratory Judgment:

A. That the federal defendants are required by law to make or require an adequate environmental impact statement pursuant to NEPA on each of the projects alleged herein;

B. That the loans made or contemplated on the projects are illegal and void without compliance by defendants with NEPA as alleged herein.

(2) That the court preliminarily and permanently enjoin the defendants from further consideration or actions in aid of the projects, and each of them, unless and until there has been full compliance with NEPA, including the existence of an adequate environmental impact statement on each of the projects;

(2)(a) As an alternative to (2) that the court preliminarily and permanently enjoin further construction of those portions of the MRCWS which shall or might tend to cause the environmental intrusions, damages, and degradation as alleged herein, until and unless protective and remedial measures have been taken to avoid and prevent them; and that the court preliminarily and permanently enjoin the defendants from further consideration or actions in aid of the SLRWS unless and until there has been full compliance with NEPA, including the existence of an adequate environmental impact statement;

(3) That the court retain jurisdiction over the cause to determine, as necessary, whether defendants have performed their statutory duties in compliance with the mandate of the court;

(4) For plaintiff's costs of suit including a reasonable attorneys' fee;

(5) For such other and further relief as the court shall deem just and proper in the premises.

DATED this 14 day of July, 1977.

SIERRA CLUB

By Sierra Club Legal Defense Fund, Inc.

H. Anthony Ruckel

William H. Haring
1612 Tremont Place, 335 Republic Bldg.
Denver, Colorado 80202
Telephone: (303) 892-6501



John N. Gridley, III
101 South Main Avenue, Suite 422
Sioux Falls, South Dakota 57102
Telephone: (605) 339-1748

VERIFICATION

STATE OF SOUTH DAKOTA }
COUNTY OF } ss.

I, Phyllis Larson Hart, am Vice Chairperson of the
Neotoma Chapter of the Sierra Club, and I do solemnly
affirm that I have read the foregoing Complaint, that I am familiar
with the facts in the case as outlined, and to the best of my infor-
mation and belief, all of the facts in the foregoing Complaint are
true and correct.

DATED this 17th day of July, 1977.

Phyllis Larson Hart

Subscribed and sworn to before me this 17th day of July,
1977.

My Commission expires: July 1, 1978

Shirley A. Johnson
Notary Public

UNITED STATES DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20250

June 21, 1976

7 SECRETARY'S MEMORANDUM
No. 1827, Supplement 1

Statement of Prime Farmland, Range, and Forest Land

The continued loss of lands well suited to the production of food, forage, fiber, and timber, and the degradation of the environment resulting from those losses is a matter of growing concern to the Nation. Major consideration must be given to prime lands and the long-range need to retain the productive capability and environmental values of American agriculture and forestry. Developments that result in irreversible land use changes represent a loss of valuable natural resources. The process is dramatic in some local areas. At the national level, individual losses appear small, but the cumulative effect can adversely impact domestic and international production.

The concerns about wise use of prime lands are local, Statewide, and national in scope. The loss of land suitable for sustained crop and wood production in a region or locality can influence the viability of supporting supply, processing and marketing facilities. Continued loss of farmland, range, and forest land production affects the economy locally, influencing employment and income levels. In addition, it limits other qualities essential to the well-being of our people.

Land use alternatives are generally available that can minimize impacts on prime lands. Such alternatives should be explored carefully, particularly where Federal funds are involved. When possible, land use decisions should be avoided which irrevocably commit prime lands to nonfarmland, nonrange, and nonforestland uses, thereby foreclosing the options of future generations. USDA will urge all agencies to adopt the policy that Federal activities that take prime agricultural land should be initiated only when there are no suitable alternative sites and when the action is in response to overriding public need. The long-term implications of these land use conversions on the productive capacity of our farmland, range, and forest land, as well as on environmental impacts, should be evaluated and made known to the public.

The Department, through the Land Use Committee, counterpart State and local committees, and the activities of all concerned agencies, groups, and organizations will advocate the protection of prime and unique farmlands, range, and forest lands from premature or unnecessary conversion to nonagricultural land use. Urban or built-up uses and water impoundments that preclude utilization or recovery to high quality agriculture or forestry purposes are of particular concern.

State and local interests in retaining prime farmland, range, and forest land for production are often based on concerns other than the demands for food, forage, fiber, or timber. Open space, environmental quality, visual quality, and local economic impacts are often cited as reasons for protecting these lands. Many of these lands have modest production capability, but are valued because of location and other unique factors that make them of State or local importance. Retaining farmland, range, and forest land enhances local values and protects resource options for the future. The Department will make specific efforts to assist States and localities to identify lands of State and local concern and support efforts to protect these lands from premature or unnecessary conversion to other uses.

The Statement on Land Use Policy (Secretary's Memorandum No. 1827) and the following specific policies are set forth for the guidance of the agencies in this Department in regard to prime lands:

1. Advocate the protection of prime lands from premature or unnecessary conversion to other land uses. Priority will be given to prime lands threatened by conversion to irreversible land uses.
2. Assure that environmental impact statement procedures and review processes thoroughly consider and evaluate the impact of major Federal actions on prime farmland, range, and forest lands.
3. Emphasis will be placed on programs to inventory, assess and evaluate the Nation's farmland, range, and forest lands to assist decision makers and the general public's understanding of the kind, extent, location, and current status of prime lands.
4. Cooperative efforts with States, local governments and universities will be initiated to assure concerns for food, fiber, and wood production are recognized and emphasized in the identification of prime lands.
5. USDA agency actions and programs will give thorough consideration to the local, State, and national concerns for the retention of prime lands. The necessity of conversion of these lands to other uses will be considered only after a determination that feasible alternatives do not exist or that overriding public needs warrant the action.
6. The agencies in the Department will review their programs to insure consistency with the intent of this supplement.

John A. Knebel
John A. Knebel
Acting Secretary

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH DAKOTA
Civil Action No. 2:07-102

SIERRA CLUB, a non-profit California
corporation,

Plaintiff,

vs.

GORDON CAVANAUGH, et al.,

Defendants.

INTERROGATORIES
TO DEFENDANTS
(SET 1)

TO DEFENDANT RONALD WALKER AND HIS ATTORNEY:

Plaintiff Sierra Club hereby requires you to answer the following Interrogatories, under oath, pursuant to Rule 33 and other related sections of the Federal Rules of Civil Procedure.

INTERROGATORIES

(1) State your full name, present address, address of employment, and the business telephone.

(2) Have you prepared or directed the preparation of an environmental impact assessment (EIA) concerning the application of defendant Minnehaha Rural Community Water, Corp., for a loan to be issued by the Farmers Home Administration to assist the financing of the Minnehaha Rural Community Water System?

(3) If the answer to the foregoing Interrogatory is "yes", then state with particular detail the facts and sources of information upon which the following conclusions in the attached EIA were reached:

a. The conclusion in item VI that rural opinions are favorable toward the project;

b. The conclusion in item VII that no controversial issues regarding the project have been noted;

c. The conclusion in item IX that the project will not require the use of water in short or critical supply;

d. The conclusion in item XI that the project will not result in the generation of a waste disposal problem;

e. The conclusion in item XI that the project will not result in an undesirable housing development pattern.

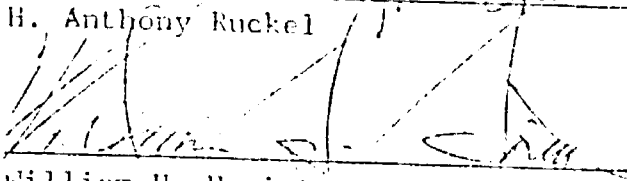
(4) To the degree that any of your answers in the foregoing Interrogatory referred to or were based upon documents, memoranda, correspondence, reports or transcripts, then attach a copy of such materials to your Answers to these Interrogatories.

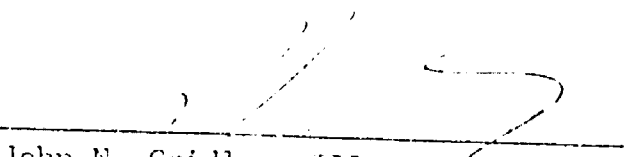
DATED this 14 day of Nov, 1977.

SIERRA CLUB

By Sierra Club Legal Defense Fund, Inc


H. Anthony Ruckel


William H. Haring
1612 Tremont Place, 335 Republic Bldg.
Denver, Colorado 80202
Telephone: (303) 892-6301


John N. Gridley, III
101 South Main Avenue, Suite 422
Sioux Falls, South Dakota 57102
Telephone: (605) 339-1748

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH DAKOTA
Civil Action No. 211077-2020

SIERRA CLUB, a non-profit California
corporation,

Plaintiff,

vs.

GORDON CAVANAUGH, et al.,

Defendants.

INTERROGATORIES
TO DEFENDANTS
(SET I)

TO DEFENDANT MINNEHAHA COMMUNITY WATER, CORP.,
AND ITS ATTORNEY OF RECORD:

Plaintiff Sierra Club hereby requires you to answer the following
Interrogatories, under oath, pursuant to Rule 33 and other related
sections of the Federal Rules of Civil Procedure.

DEFINITIONS:

For purposes of these Interrogatories, the following definitions
will apply:

"You" means any individual acting as an officer, director, employee,
contractor with, shareholder, agent or otherwise in a capacity repre-
senting the Minnehaha Community Water, Corp.

"(The) project" is the Minnehaha Rural Community Water System.

"(The) governmental defendants" are those individuals designated,
inter alia, in paragraph 13 of the Complaint filed in this action.

INTERROGATORIES

(1) State your name, address and all positions you hold with the
defendant.

(2) Identify by name and address each individual who has assisted
you in answering these Interrogatories, specifying the questions involv

(3) In comparing information and projections submitted to the
Farmers Home Administration in connection with the loan process on

the project and what is currently known, set forth the information as originally submitted, together with any changes or additions regarding:

- a. The serviceable area of the project;
- b. The specific areas to actually be serviced;
- c. Sources of funds, plans for repayment, and timing of payments themselves back to the Farmers Home Administration for its loan on the project;
- d. The number and geographical concentration of bulk users;
- e. The total numbers and ratios between the various types of users, including a comparison of farm and non-farm use;
- f. Criteria for classifying user types;
- g. Cost of the project;
- h. Total capacity, including users and millions of gallons per day.

(4) Have you discussed with the governmental defendants or their agents or representatives the inevitable or projected impacts that the project will have in stimulating or making more likely the taking or removal of prime agricultural lands? If so, set forth in detail the times, places, individuals participating or present, a summary of what was said, and if written matter was involved or referred to, recite the contents verbatim or attach copy of such written matter to your Answer.

(5) Have you discussed with the governmental defendants or their agents or representatives the inevitable or projected impacts that the project will have in the stimulation of uncontrolled rural sprawl development including subdivisions? If so, set forth in detail the times, places, individuals participating or present, a summary of what was said, and if written matter was involved or referred to, recite the contents verbatim or attach copy of such written matter to your Answer.

(6) Have you discussed with the governmental defendants or their agents or representatives the inevitable or projected impacts that

the project will have in the taking of water in short or critical supply and/or potential reduction in the quality of the ground water system? If so, set forth in detail the times, places, individuals participating or present, a summary of what was said, and if written matter was involved or referred to, recite the contents verbatim or attach copy of such written matter to your Answer.

(7) Have you discussed with the governmental defendants or their agents or representatives the inevitable or projected impacts that the project will have with waste disposal problems and waste hazards? If so, set forth in detail the times, places, individuals participating or present, a summary of what was said, and if written matter was involved or referred to, recite the contents verbatim or attach copy of such written matter to your Answer.

(8) Have you discussed with the governmental defendants or their agents or representatives the inevitable or projected impacts that the project will have with regard to damage to vegetation and wildlife? If so, set forth in detail the times, places, individuals participating or present, a summary of what was said, and if written matter was involved or referred to, recite the contents verbatim or attach copy of such written matter to your Answer.

(9) Identify by name and address those persons or entities who have obtained bulk subscriber rights to the project, how if not stated hereinabove one qualifies as a bulk subscriber, and the charges involved.

(10) State what policies exist or requirements before a subscriber will be entitled to hook up into the project system.

(11) Explain in detail what planning efforts have been undertaken by you and representatives of city and town governments to effectuate the preservation of water quality, water availability, and environmentally acceptable housing density as affected by the project.

(12) In distinguishing between users who may qualify for the project services, state whether there are any quotas or other restrictions now in effect or previously for determining numbers and distribution.

(13) Explain what policies are being implemented to limit, disperse, or otherwise control the number, concentration and timing of the availability of bulk subscriptions to the project.

(14) As to potential expansion of the physical facilities and/or serviceable area of the project, describe in detail:

a. Any current planning efforts to expand any aspect of the project or its impact;

b. Any circumstances or foreseeable events which may limit the expansion capabilities of the project.

(15) Do you maintain a record of inquiries made for information pertaining to the project? If so, please state where such information is maintained, how the responses and inquiries are organized, and the persons who have custody over such information.

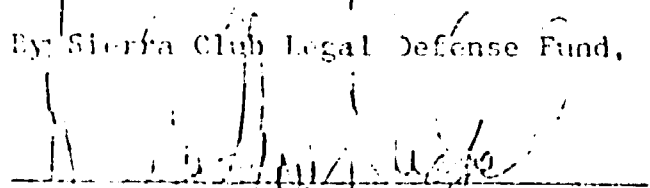
(16) Explain in detail the sources of money available and/or anticipated to pay for the loan(s) required by the project, the timing of such payments, and the particulars of any projections necessary to achieve repayment.

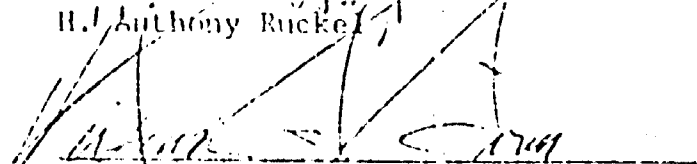
(17) Set forth in detail what stages of construction have been completed on the project; what remains to be done and when; and what percentage of the project is now operable, including the rationale for arriving at the figure.

DATED this 11 day of July, 1977.

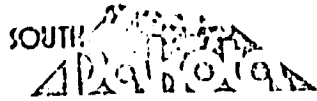
SIERRA CLUB

By Sierra Club Legal Defense Fund, Inc.


H. Anthony Rucker


William H. Haring
1612 Trueman Place, 335 Republic Bldg.
Denver, Colorado 80202
Telephone: (303) 892-6301

John N. Gridley, III
101 South Main Avenue, Suite 422
Sioux Falls, South Dakota 57102
Telephone: (605) 339-1748



Department of Natural Resource Development

WATER RIGHTS COMMISSION

Joe Foss Building, Pierre, South Dakota 57501
Phone 605/224-3151

September 12, 1977

Robert C. Swartout
Chief Community Programs
Farmers Home Administration
P. O. Box 821
Huron, South Dakota 57350

Dear Mr. Swartout:

This will acknowledge your letter concerning the suit brought by the Sierra Club against Farmers Home Administration personnel, the South Lincoln County Rural Water System and the Minnehaha Community Water Corporation. There seem to be three main issues involved in this matter - land use and zoning; individual wastewater disposal and control of water. All three raise the question of State's rights.

The State of South Dakota, through the Water Rights Commission in accordance with Title 46 of the South Dakota Compiled Laws, is the only agency which has authority to determine what waters of the State can be converted for public use or controlled for public protection. State Statutes also provide that protection of the public interest and the development of water resources of the State is of vital concern to the people of the State and the State shall determine in what way the waters of the State should be developed for the greatest public benefit. The State has further declared that it is in the best public interest that the quantity of water withdrawn annually from a groundwater source shall not exceed the quantity of the average estimated annual recharge of water to such groundwater. Further, the State has also declared that all water within the State is property of the people of the State. The Federal Government has no say as to how State waters are to be appropriated. Specifically, it is up to the State, through the Water Rights Commission, to determine if groundwater use by the Minnehaha Community Water System or the South Lincoln County Rural Water System will deplete available groundwater supplies.

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The South Lincoln County Rural Water System has only recently made an application for a water right; this application has not been acted upon by the Commission to date. The Minnehaha Community Water Corporation Water Right Application Number 2311-3 was advertised for a public hearing at a regular Water Rights Commission meeting at Rapid City. Following the public hearing on July 24, 1975, the Commission approved the application. The Commission received no protests to the application before or at the hearing. As required by Statute, before the Commission approves an application the Commission must determine that unappropriated water is available, that the project is feasible and that the application is in the public interest.

Application No. 2311-3 was approved for 4.0 cubic feet per second (cfs) or 1796 gallons per minute which is about 2.5 million gallons per day (mgd) with the water to be obtained from five 50 foot wells. The 4.0 cfs when used on a continuous basis is equivalent to the amount of water which could be authorized to irrigate up to 1120 acres during an irrigation season. A copy of the water right is attached for your information.

The Summons points out that the maximum average yield which could be obtained during a two year period from the Big Sioux Aquifer to the north of Sioux Falls is 24 mgd. This information is contained in United States Geological Survey Paper Number 2024, "Water Resources of the Big Sioux River Valley near Sioux Falls, South Dakota". The 24 mgd is based upon an analog model of the aquifer with the well field simulated as encompassing the entire aquifer. The analog was completed for drought conditions, that is without recharge from precipitation and with a flow equivalent to the two year period of lowest recorded stream flow in the Big Sioux River. Using these conditions, the maximum sustained average daily yield of groundwater is less than 24 million gallons per day. This value is primarily dependent upon aquifer transmissibility and storage; however, under normal conditions the sustained yield is primarily dependent upon the availability of water in the river and hydraulic conductivity of the stream bed.

The Sioux Falls existing water rights and future rights do not include the entire aquifer. The Sioux Falls future use rights area ends about 1½ miles south of Baltic while the Minnehaha system wells are located north of Baltic, about 3½ miles from the Sioux Falls future use area.

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Most of the water pumped from the existing Sioux Falls city well field is water which is originally derived from the Big Sioux River. Less than one million gallons per day is transmitted into the well field by under flow through the aquifer. This fact was supported during the past two years when water levels within the Sioux Falls existing well field were low, but to the north outside of the well field water levels were representative of levels expected during dry weather. Although the City of Sioux Falls may need 24 mgd in the future on an average basis, they may not be able to obtain the water from their well field during extremely dry periods, even though to the north of the well field and outside of their future use area the Minnehaha Community System wells and nearby irrigation wells may experience no trouble.

Development of groundwater in the Sioux Aquifer depends on the amount of surface water in the Big Sioux River. During dry periods, the base flow in the Big Sioux River is primarily water released from groundwater storage upstream. During periods of high stream flow, water from the river recharges the aquifer through the stream banks; during floods, large amounts of water on the flood plain percolate through the overlying top soil and alluvium and recharge the aquifer.

Construction of a rural water system would seem to be no different than construction of electric service lines, or telephone service lines or good roads. Regulation of subdivision housing and other development in Minnehaha County and Lincoln County is a function of County Government as specified by Chapter 11-2 of the South Dakota Compiled Laws. Zoning statutes provide that zoning ordinances, subdivision ordinances, official zoning maps or other official controls as deemed necessary by the county shall be included as adjuncts to and in accordance with a comprehensive county law. The zoning statutes provide for land use control through adoption by vote of the people of a comprehensive plan. Whether a county has local zoning controls or not is a local county option as authorized by the State of South Dakota. Any Board of County Commissioners may adopt zoning ordinances, resolutions or regulations to control development within their respective county.

The Plaintiff, the Sierra Club, should take their concerns to the local county commissions since the counties have control of zoning and land use. The Minnehaha County and Lincoln County officials could be called to testify at any court proceedings to explain their existing zoning ordinances and laws.

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We are certain that the Farmers Home Administration is aware of the situation which occurred outside the city limits of Sioux Falls during the 1960's when the city through annexation and provision of water and sewer services "bailed out" surrounding residents who had built homes without effective zoning or individual wastewater disposal controls and who were, in most cases, not connected to any type of community water system. The situation demonstrated the lack of control exercised by the county at the time with respect to housing developments. It is our understanding that Minnehaha County now is seeking to control subdivision development and individual wastewater disposal. The State Department of Environmental Protection (DEP) has adopted wastewater disposal rules which also provide requirements for construction of individual wastewater disposal systems.

The primary reasons for establishing and constructing rural water systems, as you are aware, are that private well water supplies do not exist and water is hauled, the water supply is bacteriologically unsafe, or the water contains unsatisfactory chemicals, or the supply is insufficient or unreliable. Rural water is expensive; therefore, people normally do not sign up and connect to it unless it is the best water available.

Attached is information we have obtained from the Department of Environmental Protection regarding the bacteriological safety of private water supplies in South Dakota. The Sioux Falls Health Department Laboratory also does water analyses for private water supply owners in Lincoln and Minnehaha Counties which are not included in the attached tabulations. We have included a summary of a report on a detailed private water supply study in Aurora and Brule Counties. The county study indicates that voluntary sampling does not present the true picture, which is more serious than the state-wide figures seem to show.

It is doubtful that the purpose of the National Environmental Protection Act is intended to deprive rural people of a safe, sufficient and dependable source of water which is most likely to be available from a rural water system. Water from a rural water system must meet the requirements of the Federal Safe Drinking Water Act. Water delivered from many private supplies does not meet safe drinking water standards as a review of available bacteriological records and chemical analyses of rural water supplies would indicate.

Apparently the Plaintiff's members obtain their water supplies from city or community type water systems or they are fortunate in having private supplies which are sufficient in quantity, safe to

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drink, and dependable and they have not experienced the water supply problems encountered by rural residents to be served by the two rural water systems.

We suggest that you obtain what information you can from both rural water systems as to the status of present domestic supplies - quantity, quality and dependability. In Lincoln County, a county-wide groundwater study has not been completed by the State Geological Survey. It is scheduled, but has not been started to date. In Minnehaha County, a county groundwater study has not been scheduled. Only the Sioux Falls well field aquifer and the Skunk Creek Aquifer have received much attention and study.

We would also like to point out that the State, in accordance with SDCL 46-17A-22.1, provides for grants to rural water supply systems, which indicates Legislative support of rural water system development in the State.

The State also has an Environmental Impact Statement Statute, SDCL 11-1A, and a Remedies for Protection of Environment Statute, SDCL 21-10A.

SDCL 21-10A-8 specifies that in any such administrative, licensing or other proceedings as performed by an agency such as the Water Rights Commission, any alleged pollution, impairment or destruction of the air, water or other natural resources or the public trust therein shall be determined, and no conduct shall be authorized or approved which does, or is likely to have such effect so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare.

The Water Rights Commission has recognized the benefits of rural water systems and that the primary purpose of a rural water system is to deliver a sufficient, dependable and safe supply of drinking water for which there does not appear to be a feasible or prudent alternative. Zoning and land use and individual wastewater disposal control are functions of County Government, although wastewater disposal is also a responsibility of DEP. We believe the requirements of SDCL 21-10A have been met by the Water Rights Commission or through provisions of State Statutes.

Since Water Rights Commission actions are of an environmentally protective regulatory nature, its actions are exempt from the requirements of SDCL 11-1A. However, a review of the requirements

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of 11-1A does indicate that the intent of this statute has been met either through actions of the Commission, other agencies or as provided through statute. The Environmental Impact Statement requires answers to the following:

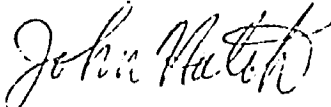
1. A description of the proposed action and its environmental setting - is included in a preliminary feasibility report and plans and specifications for the project and as part of the water right application.
2. The environmental impact of the proposed action including short-term and long-term effects - would be provision of a safe, dependable and sufficient supply of water which will contribute to an improvement in the general health and well-being of the persons served by the rural water system.
3. Any adverse environmental effects which cannot be avoided should the proposal be implemented - would no doubt include land use and zoning, individual wastewater disposal and water supply availability concerns. These concerns are provided for by statutes - county zoning option, DEP rules and State Water Statutes.
4. Alternatives to the proposed action - would be for people to continue to haul water or use unsafe, insufficient or undependable supplies.
5. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented - would include construction of the rural water system, most of which could not be salvaged; however, since the record of success and acceptance of such systems has been exceptional, anyone with reasonable knowledge of rural water systems would not question the commitment of resources. The Water Rights Commission itself considered the Minnehaha system feasible and in the public interest when considering the water right application. The same consideration will be given to the Lincoln County Application.
6. Mitigation measures proposed to minimize the environmental impact - are provided for in County Zoning, DEP Wastewater Disposal Rules and State Water Statutes.

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7. The growth-inducing aspects of the proposed action - will be dependent upon local zoning requirements.

Although the above review is rather brief, we believe that the State, through its different agencies and statutes, does satisfy and even exceed, the requirements of the Federal Environmental Impact Statement (EIS) Law. Requiring that a Federal EIS be prepared would be a duplication of effort and could even be an infringement upon State's rights.

Very truly yours,

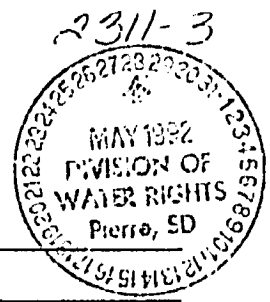
A handwritten signature in cursive script, appearing to read "John Hatch".

John Hatch, Chief Engineer
WATER RIGHTS COMMISSION

JH:nrf

Enclosure:

WELL # 1
CHECK LIST FOR FIELD INSPECTION



Permit Number 2311-3

Date 4/28/92

Other permit(s) associated with the project _____

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: EAST HALF OF NORTHEAST QUARTER (E½ NE¼) OF SECTION 29
TOWNSHIP 104 NORTH, RANGE 49 WEST OF FIFTH PRINCIPLE MERIDIAN.

2. Well Information: Well Drilling Firm Thorpe Well Drilling

No. of Wells 5 Depth(s) 33 feet

a) Casing 1) diameter 10 inch inches

b) Screen 1) type Stainless Steel

2) length 22 feet feet

2) length 10 feet

3) type Steel

c) Pump 1) make Sumo

d) Static Water Level 23.5 feet

2) model C-81

e) Motor.

3) size 5 5/8 inches

1) make _____

4) capacity 200 GPM

2) model No. _____

5) turbine pump - No. of stages _____

3) horsepower rating 5 hp

6) operating pressure 18 PSI

3. Distribution lines or canals:

a) type _____ b) size _____ c) length _____

4. System Type:

a) Sideroll:

b) Towline:

1) length _____ feet

1) length _____ feet

2) diameter of pipe _____ inches

2) sprinkler spacing _____ feet

3) sprinkler spacing _____ feet

4. System Type (continued):

c) Siphons:

1) size _____ inches

2) number _____

e) Center pivot:

1) make _____

2) overall length _____ feet

3) number of towers _____

4) distance between towers _____ feet

5) end gun _____ (Y/N)

6) high or low pressure _____

7) capacity _____ GPM

d) Gated pipe:

1) length _____ feet

2) diameter _____ inches

3) spacing of gates _____ inches

f) Gun:

1) make _____

2) nozzle size _____ inches

3) capacity _____ GPM

4) hose size _____ inches

5) hose length _____ feet

5. Dam Information:

a) height to crest _____ feet

b) height to primary spillway _____ feet

c) height to secondary spillway _____ feet

d) crest width _____ feet

e) crest length _____ feet

f) spillway length _____ feet

g) spillway width _____ feet

h) approx. storage _____ ac-ft

i) approx. storage to crest _____ ac-ft

j) date constructed _____

k) outlet tubes:

1) diameter _____ inches

2) type _____

3) valved _____ (Y/N)

4) valve type _____

5) location on structure _____

l) category of dam _____ (I,II,III)

m) inspection sheet completed _____ (Y/N)

n) name of contractor _____

6. Chemigation Equipment:

b) main line check valve _____ (Y/N)

c) low pressure drain _____ (Y/N)

f) interlock type _____

g) injection pump type _____

i) injection line check valve or positive displacement pump _____ (Y/N)

j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)

k) comments :

a) does chemigate _____ (Y/N)

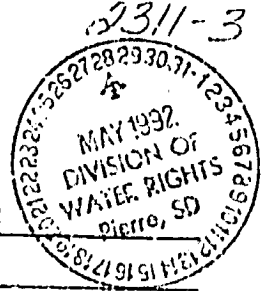
c) inspection port/air relief _____ (Y/N)

e) discharge is 20' from source _____ (Y/N)

h) injection check valve _____ (Y/N)

WELL #2

CHECK LIST FOR FIELD INSPECTION



Permit Number 2311-3

Date 4/28/92

Other permit(s) associated with the project _____

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: EAST HALF OF NORTHEAST QUARTER (E½ NE¼) OF SECT. 2, 29,
TOWNSHIP 104 NORTH, RANGE 49 WEST OF FIFTH PRINCIPLE MERIDIAN.

2. Well Information: Well Drilling Firm Thorpe Well Drilling

No. of Wells 5 Depth(s) 37 feet

a) Casing 1) diameter 10 inches b) Screen 1) type Stainless Steel

2) length 27.5 feet 2) length 10 feet

3) type Steel c) Pump 1) make Sumo

d) Static Water Level 24.5 feet 2) model C-81

e) Motor: 3) size 5 5/8 inches

1) make _____ 4) capacity 200 GPM

2) model No. _____ 5) turbine pump - No. of stages _____

3) horsepower rating 5 hp 6) operating pressure 18 PSI

3. Distribution lines or canals:

a) type _____ b) size _____ c) length _____

4. System Type:

a) Sideroll:

1) length _____ feet

2) diameter of pipe _____ inches

3) sprinkler spacing _____ feet

b) Towline:

1) length _____ feet

2) sprinkler spacing _____ feet

4. System Type (continued):

c) Siphons:

- 1) size _____ inches
- 2) number _____

e) Center pivot:

- 1) make _____
- 2) overall length _____ feet
- 3) number of towers _____
- 4) distance between towers _____ feet
- 5) erid gun _____ (Y/N)
- 6) high or low pressure _____
- 7) capacity _____ GPM

d) Gated pipe:

- 1) length _____ feet
- 2) diameter _____ inches
- 3) spacing of gates _____ inches

f) Gun:

- i) make _____
- 2) nozzle size _____ inches
- 3) capacity _____ GPM
- 4) hose size _____ inches
- 5) hose length _____ feet

5. Dam Information:

- a) height to crest _____ feet
- b) height to primary spillway _____ feet
- c) height to secondary spillway _____ feet
- d) crest width _____ feet
- e) crest length _____ feet
- f) spillway length _____ feet
- g) spillway width _____ feet
- h) approx. storage _____ ac-ft
- i) approx. storage to crest _____ ac-ft
- j) date constructed _____

k) outlet tubes:

- 1) diameter _____ inches
- 2) type _____
- 3) valved _____ (Y/N)
- 4) valve type _____
- 5) location on structure _____

l) category of dam _____ (I,II,III)

m) inspection sheet completed _____ (Y/N)

n) name of contractor _____

6. Chemigation Equipment:

- b) main line check valve _____ (Y/N)
- d) low pressure drain _____ (Y/N)
- f) interlock type _____

a) does chemigate _____ (Y/N)

c) inspection port/air relief _____ (Y/N)

e) discharge is 20' from source _____ (Y/N)

g) injection pump type _____

h) injection check valve _____ (Y/N)

i) injection line check valve or positive displacement pump _____ (Y/N)

j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)

k) comments :

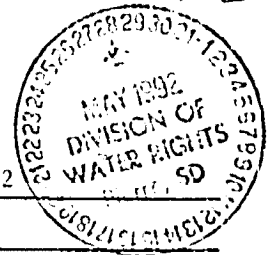
WELL #3

CHECK LIST FOR FIELD INSPECTION

Permit Number 2311-3

Date 4/28/92

Other permit(s) associated with the project _____



NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: EAST HALF OF NORTHEAST QUARTER (E $\frac{1}{2}$ NE $\frac{1}{4}$) OF SECTION 29
TOWNSHIP 104 NORTH, RANGE 49 WEST OF FIFTH PRINCIPLE MERIDIAN.

2. Well Information: Well Drilling Firm Thorpe Well Drilling

No. of Wells 5 Depth(s) 35 feet

a) Casing 1) diameter 10 inches

2) length 25 feet

3) type Steel

b) Screen 1) type Stainless Steel

2) length 10 feet

c) Pump 1) make Eumo

d) Static Water Level 25.08 feet

2) model C-81

e) Motor:

3) size 5 5/8 inches

1) make _____

4) capacity 200 GPM

2) model No. _____

5) turbine pump - No. of stages _____

3) horsepower rating 5 hp

6) operating pressure 18 PSI

3. Distribution lines or canals:

a) type _____ b) size _____ c) length _____

4. System Type:

a) Sideroll:

1) length _____ feet

2) diameter of pipe _____ inches

3) sprinkler spacing _____ feet

b) Towline:

1) length _____ feet

2) sprinkler spacing _____ feet

4 System Type (continued):

c) Siphons:

- 1) size _____ inches
- 2) number _____

e) Center pivot:

- 1) make _____
- 2) overall length _____ feet
- 3) number of towers _____
- 4) distance between towers _____ feet
- 5) end gun _____ (Y/N)
- 6) high or low pressure _____
- 7) capacity _____ GPM

d) Gated pipe:

- 1) length _____ feet
- 2) diameter _____ inches
- 3) spacing of gates _____ inches

f) Gun:

- 1) make _____
- 2) nozzle size _____ inches
- 3) capacity _____ GPM
- 4) hose size _____ inches
- 5) hose length _____ feet

5. Dam Information:

- a) height to crest _____ feet
- b) height to primary spillway _____ feet
- c) height to secondary spillway _____ feet
- d) crest width _____ feet
- e) crest length _____ feet
- f) spillway length _____ feet
- g) spillway width _____ feet
- h) approx. storage _____ ac-ft
- i) approx. storage to crest _____ ac-ft
- j) date constructed _____

k) outlet tubes:

- 1) diameter _____ inches
- 2) type _____
- 3) valved _____ (Y/N)
- 4) valve type _____
- 5) location on structure _____
- l) category of dam _____ (I,II,III)
- m) inspection sheet completed _____ (Y/N)
- n) name of contractor _____

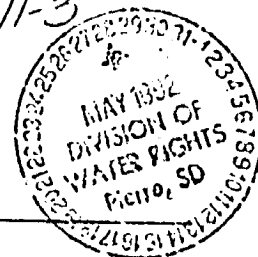
6. Chemigation Equipment.

- b) main line check valve _____ (Y/N)
- d) low pressure drain _____ (Y/N)
- f) interlock type _____
- g) injection pump type _____
- i) injection line check valve or positive displacement pump _____ (Y/N)
- j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)
- k) comments :
- a) does chemigate _____ (Y/N)
- c) inspection port/air relief _____ (Y/N)
- e) discharge is 20' from source _____ (Y/N)
- h) injection check valve _____ (Y/N)

WELL #4

CHECK LIST FOR FIELD INSPECTION

2311-3



Permit Number 2311-3

Date 4/25/92

Other permit(s) associated with the project _____

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: EAST HALF OF NORTHEAST QUARTER (E $\frac{1}{2}$ NE $\frac{1}{4}$) OF SECTION 29 TOWNSHIP 104 NORTH, RANGE 49 WEST OF FIFTH PRINCIPLE MERIDIAN.

2. Well Information: Well Drilling Firm Thorpe Well Drilling

No. of Wells 5 Depth(s) 36 feet

a) Casing 1) diameter 10 inches

2) length 25 feet

3) type Steel

b) Screen 1) type Stainless Steel

2) length 10 feet

c) Pump 1) make Sumo

2) model C-81

3) size 5 5/8 inches

4) capacity 200 GPM

5) turbine pump - No. of stages

6) operating pressure 18 PSI

d) Static Water Level 26.16 feet

e) Motor:

1) make

2) model No.

3) horsepower rating 5 hp

3. Distribution lines or canals:

a) type b) size c) length

4. System Type:

a) Sideroll:

1) length feet

2) diameter of pipe inches

3) sprinkler spacing feet

b) Towline:

1) length feet

2) sprinkler spacing feet

4. System Type (continued):

c) Siphons:

1) size _____ inches

2) number _____

e) Center pivot:

1) make _____

2) overall length _____ feet

3) number of towers _____

4) distance between towers _____ feet

5) end gun _____ (Y/N)

6) high or low pressure _____

7) capacity _____ GPM

d) Gated pipe:

1) length _____ feet

2) diameter _____ inches

3) spacing of gates _____ inches

f) Gun:

1) make _____

2) nozzle size _____ inches

3) capacity _____ GPM

4) hose size _____ inches

5) hose length _____ feet

5. Dam Information:

a) height to crest _____ feet

b) height to primary spillway _____ feet

c) height to secondary spillway _____ feet

d) crest width _____ feet

e) crest length _____ feet

f) spillway length _____ feet

g) spillway width _____ feet

h) approx. storage _____ ac-ft

i) approx. storage to crest _____ ac-ft

j) date constructed _____

k) outlet tubes:

1) diameter _____ inches

2) type _____

3) valved _____ (Y/N)

4) valve type _____

5) location on structure _____

l) category of dam _____ (I,II,III)

m) inspection sheet completed _____ (Y/N)

n) name of contractor _____

6. Chemigation Equipment:

b) main line check valve _____ (Y/N)

d) low pressure drain _____ (Y/N)

f) interlock type _____

g) injection pump type _____ h) injection check valve _____ (Y/N)

i) injection line check valve or positive displacement pump _____ (Y/N)

j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)

k) comments :

a) does chemigate _____ (Y/N)

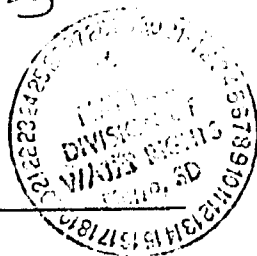
c) inspection port/air relief _____ (Y/N)

e) discharge is 20' from source _____ (Y/N)

WELL #5

CHECK LIST FOR FIELD INSPECTION

2311-3



Permit Number 2311-3

Date 4/28/92

Other permit(s) associated with the project _____

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: EAST HALF OF NORTHEAST QUARTER (E½ NE¼) OF SECTION 29, TOWNSHIP 104 NORTH, RANGE 49 WEST OF FIFTH PRINCIPLE MERIDIAN.

2. Well Information: Well Drilling Firm Thorpe Well Drilling

No. of Wells 5 Depth(s) 46 feet

a) Casing 1) diameter 10 inches

2) length 36 feet

3) type _____

d) Static Water Level 25.84 feet

e) Motor:

1) make _____

2) model No. _____

3) horsepower rating 7.5 hp

b) Screen 1) type Stainless Steel

2) length 10 feet

c) Pump 1) make Sumo

2) model C-9

3) size 6 inches

4) capacity 250 GPM

5) turbine pump - No. of stages _____

6) operating pressure 18 PSI

3. Distribution lines or canals:

a) type _____ b) size _____ c) length _____

4. System Type:

a) Sideroll:

1) length _____ feet

2) diameter of pipe _____ inches

3) sprinkler spacing _____ feet

b) Towline:

1) length _____ feet

2) sprinkler spacing _____ feet

4. System Type (continued):

c) Siphons:

1) size _____ inches

2) number _____

e) Center pivot:

1) make _____

2) overall length _____ feet

3) number of towers _____

4) distance between towers _____ feet

5) end gun _____ (Y/N)

6) high or low pressure _____

7) capacity _____ GPM

d) Gated pipe:

1) length _____ feet

2) diameter _____ inches

3) spacing of gates _____ inches

f) Gun:

1) make _____

2) nozzle size _____ inches

3) capacity _____ GPM

4) hose size _____ inches

5) hose length _____ feet

5. Dam Information:

a) height to crest _____ feet

b) height to primary spillway _____ feet

c) height to secondary spillway _____ feet

d) crest width _____ feet

e) crest length _____ feet

f) spillway length _____ feet

g) spillway width _____ feet

h) approx. storage _____ ac-ft

i) approx. storage to crest _____ ac-ft

j) date constructed _____

k) outlet tubes:

1) diameter _____ inches

2) type _____

3) valved _____ (Y/N)

4) valve type _____

5) location on structure _____

l) category of dam _____ (I, II, III)

m) inspection sheet completed _____ (Y/N)

n) name of contractor _____

6. Chemigation Equipment:

b) main line check valve _____ (Y/N)

d) low pressure drain _____ (Y/N)

f) interlock type _____

g) injection pump type _____

i) injection line check valve or positive displacement pump _____ (Y/N)

j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)

k) comments :

a) does chemigate _____ (Y/N)

c) inspection port/air relief _____ (Y/N)

e) discharge is 20' from source _____ (Y/N)

h) injection check valve _____ (Y/N)

Permit No. 2311-3Big Sioux River Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Division of Water Rights, DENR, Foss Bldg., Pierre, SD 57501

I have this day made a thorough examination of the water use system constructed by Minnehaha Community Water Corp. of RR2, Box 26A, Dell Rapids, SD 57022 holder of Permit No. 2311-3, bearing the priority of July 8, 1975 authorizing the diversion of 4.0 cu. ft. per second of the waters of Big Sioux - Sioux Falls Aquifer for Rural Water System use purposes, in Minnehaha County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

5 wells - Wells are 33/37/35/36/46 feet deep, respectively. All wells have 10" steel casing varying in length from 22 to 36 feet. All wells have 10" stainless steel screen 10' in length. Sumo pumps - Wells No. 1 to 4 have Model No. C-81 (all 5-5/8") and No. 5 has Model No. C-9 (6"), all 2 stages, all 200 GPM, except No. 5 is 250 GPM all at 18 PSI. All Sumo Motors with same Model Nos. as pumps, Nos. 1 to 4 are 5 HP and No. 5 is 7.5 HP.

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

2488' of 10" and 1546' of 12" PVC pipe

C. Works used to apply water to beneficial use:

Rural water supply system

The system is in the following condition excellent. The points of diversion are located No. 1 is 905'W and 377'S, No. 2 is 1018'W and 679'S, No. 3 is 1221'W and 1154'S, No. 4 is 943'W and 1320'S and No. 5 is 1244'W and 1433'S; all from the NE corner of Section 29-T104N-R49W. The works are capable of diverting and conveying to the place of use 2.33 cu. ft. per second of water which is to be used for rural water system. Water has been put to beneficial use. The license should be issued for 2.33 cfs.

Applicable permit qualifications have been complied with X Yes NoExceptions to compliance are: None Date 12/31/92


Gregory C. Johnston
Natural Resources Engineer
DENR, Water Rights Division

2311-3

REPORT ON INSPECTION OF PERMIT NUMBER 2311-3

DATE 12/30/92

Other permit(s) associated with the project 4838-3/5152-3/5468-3

DIVERSION POINT LEGAL LOCATION: 5 wells - No. 1 is 905'W and 377'S, No. 2 is 1015'W and 679'S, No. 3 is 1221'W and 1154'S, No. 4 is 943'W and 1320'S and No. 5 is 1244'W and 1433'S; all from the NE corner of Section 29-T104N-R49W.

WELL INFORMATION: Well Drilling Firm Thorpe Drilling

No. of Wells 5 Depth(s) 33/37/35/36/46

a) Casing: 1) diameter all are 10"

2) length 22 to 36 feet

3) type all steel

b) Screen: 1) type all Stainless Steel

2) length all 10 feet

c) Pump 1) make Sumo

4) capacity 1 to 4 are 200, No. 5 is 250 GPM

2) model 1 to 4 are C-81, No. 5 is C-9 5) turbine pump - No. of stages all 2

3) size 1 to 4 are 5-5/8, No. 5 is 6 inches 6) operating pressure all 18 PSI

d) Motor: 1) make all Sumo

2) model No. Same as Pump Model Nos.

3) horsepower rating Nos. 1 to 4 are 5/ No. 5 is 7.5 hp

e) Static Water Level varies from 26 to 30 feet

DISTRIBUTION LINES OR CANALS:

a) type All PVC b) size 10/12 c) length 2488/1546 feet

System Type:

a) Rural water supply system

CHEMIGATION EQUIPMENT:

a) does chemigate N (Y/N)

PERMIT QUALIFICATIONS AND REGULATIONS:

a) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A (Y/N)

b) Special qualifications to permit being abided by Y (Y/N)

c) All structures, wells and lands on map Y (Y/N)

d) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A (Y/N)

2311-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 9, 1993

(2311-3)
5468-3

Minnehaha Community Water corp.
RR 2, Box 26A
Dell Rapids, SD 57022

Dear Sirs:

The inspection of your water use system and the inspection of the extent of application of water to beneficial use, as developed under Water Permit Nos. 2311-3 and 5468-3, has been completed. Your final water right document, the Water Licenses, can now be issued.

Statutes require that we charge a \$50.00 fee per license for the inspection and issuance of the Water Licenses. Upon receipt of the \$100.00 fee from you, we will begin processing your Water Licenses.

South Dakota Water Law 46-5-30.1 requires that a permit holder may not divert water until the \$50.00 license fee has been paid. Please contact us if you have any questions.

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Division
(605) 773-3252

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

RECEIPT

Division of Water Rights

South Dakota Department of Environment and Natural Resources

2311-3
413863

Pierre, _____ August 18 _____, 19 93

RECEIVED OF Minnehaha Community Water Corp, RR 2 Box 26A, Dell Rapids, SD 57022

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
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>2311-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatch
Chief Engineer

2311-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2311-3

(1) The Minnehaha Community Water Corporation, of RR #2 Box 26A, Dell Rapids, SD 57022 made Application No. 2311-3, July 8, 1975 for a water permit to appropriate 4.00 cubic feet of water per second from groundwater (five or more wells), Minnehaha County, South Dakota for rural water system purposes. Permit No. 2311-3, with a priority date of July 8, 1975 was approved July 24, 1975 and issued to the applicant(s) for diversion of water with construction of the described water supply system to be completed on or before July 24, 1977 and for the application to beneficial use of said water on or before July 24, 1978.

(2) It is certified that the applicant 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 2.33 cubic feet of water per second for beneficial use. The location of the diversion points are Well #1 - 905'W and 377'S; Well #2 - 1018'W and 679'S; Well #3 - 1221'W and 1154'S; Well #4 - 943'W and 1320'S; Well #5 - 1244'W and 1433'S; all from the NE corner of Section 29, T104N, R49W (E 1/2 NE 1/4).

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the Minnehaha Community Water Corporation of RR #2 Box 26A, Dell Rapids, SD 57022 the holders and/or owners of Water Permit No. 2311-3 is issued a license to appropriate water, the right to use 2.33 cubic feet of water per second from groundwater (five wells) with a priority date of July 8, 1975 from the location specified in (2) of this license. The water is to be used for rural water system purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 2311-3 and subject to South Dakota State Law.



SEP 21 1993

JOHN HATCH, Chief Engineer
Water Rights Division

Department of Environment and Natural Resources



2311-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

SEP 21 1993

2311-3

John Buss, Manager
Minnehaha Community Water Corporation
RR 2, Box 26A
Dell Rapids, SD 57022

Dear Sirs:

Enclosed is Water License No. 2311-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 413863 in the amount of \$50.00 which you paid for the inspection and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 2311-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Very truly yours,

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

gm
enclosures



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)	
	No. _____	Hydrologic Unit _____
	Basin _____	
	Newspaper _____	

Check use(s) of water:

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

Type of Application: _____ New _____ Vested Right (Use predates Mar 2, 1955) _____ Future Use Reservation
(check one) _____ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
X Amendment/Correction to Permit No. 2311-3

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
Well Nos. 1 & 2 operated under this permit no longer produce water at useful rates.

Proposed action will replace wells 1&2 with well 1A to be located approximately 100 ft. from well #2.

1. Name of Applicant Minnehaha Community Water Corp. Phone 605-428-3374
(check one) ☐ Owner ☐ Tenant/lessee

Mailing Address 47381 248th Street, Dell Rapids State SD 57022
(Street, RR, or Box) (Zip Code)

2. Amount of water claimed _____ *CFS or _____ ⁴⁰⁰1 **GPM _____ ***AF
 (*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Existing well 1 rated 200 gpm, well 2 rated 200 gpm. Replacement well rated 400 gpm.
Sioux Falls management unit, Big Sioux Aquifer

4. Location of point of diversion (example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) _____
NE 1/4 Section 29 T104N R49W, 2 miles south and 1 mile west of Dell Rapids, SD

 _____ County _____ Minnehaha

5. County or counties where water will be used Minnehaha

6. Annual period during which water is to be used Year-round

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Project consists of construction of a new well to replace existing wells 1 and 2 which are no longer useable due to plugged formation in the vicinity of the well screen. The replacement well will restore the appropriation capacity reserved for Wells 1 and 2 under Permit No. 2311-3.

STATE OF SOUTH DAKOTA)

County of Winnebago)

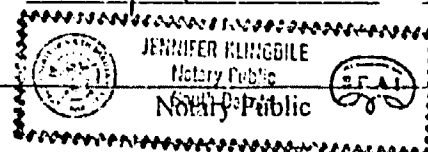
John Buss
map and that the matters

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

John Buss, the applicant, certify that I have read this application, have examined the attached map and that the matters are true and that I intend, and am able to complete the necessary construction.

Signed Jennifer Kleiglitz

Subscribed and sworn to before me this 16th day of April 19 98



**WATER SUPPLY WELL 1A
WELL LOCATION**

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
WATER RIGHTS PROGRAM

April 22, 1998

RE: Request for a change of diversion point for Water Right No. 2311-3, Minnehaha Community Water Corporation

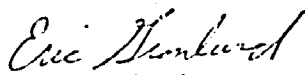
Minnehaha Community Water Corporation has submitted an application requesting authorization to change one of the points of diversion for Water Right No. 2311-3. SDCL 46-5-13.1 provides that a point of diversion may be changed or additional points of diversion may be approved without application or publication of a notice of hearing if the additional point of diversion is from the same source of water, no additional water is appropriated and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

Water Right No. 2311-3 appropriates 2.33 cubic feet of water per second (cfs) from five wells constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer. The wells are all located in the E1/2 NE1/4 of Section 29, T104N, R49W. Water Right No. 2311-3 has a priority date of July 8, 1975 and water is used for a rural water system.

The request is to construct a new well to replace two existing wells. These wells are identified as Wells No. 1 and 2. According to the applicant, production from the two wells has declined due to plugging in the vicinity of the screen. The proposed new well is to be constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer. Water rights staff investigation of Well No. 1 and 2 indicates each well as being capable of producing 200 gallons per minute. It appears that the application proposes to develop the new well in order to provide the amount of water appropriated by Water Right No. 2311-3.

Dave Odens with Banner Associates has indicated the two existing wells will be used for monitoring purposes and ultimately be capped or plugged.

The new well will be located between the present location of Well Nos. 1 and 2. This will not cause the well to be located closer to any existing permitted sources. The combined diversion rate from the 3 existing permitted wells and this new replacement well can not exceed the 2.33 cfs appropriation authorized by Water Right No. 2311-3.


Eric Gronlund
Natural Resources Engineer

The Chief Engineer makes a finding that the change of diversion point does not increase the potential for interference with existing diversions. In making the finding, "does not increase the potential for interference" is interpreted to mean potential for adverse interference. This point of diversion may be changed for Water Right No. 2311-3 without requiring application or publication of a notice of hearing pursuant to SDCL 46-2A-4. The combined diversion rate from the four wells (Wells Nos. 1A, 3, 4 and 5) authorized by Permit No. 2311-3 may not exceed 2.33 cfs from the Sioux Falls Management Unit of the Big Sioux Aquifer.

 4-28-98
John Hatch, Chief Engineer
Water Rights Program



2311-3

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

May 4, 1998

John Buss
Minnehaha Community Water Corp.
47381 248th Street
Dell Rapids, SD 57022-5305

Dear Mr. Buss:

I am writing in regard to your request to change the diversion point for Water Right No. 2311-3. Water Right No. 2311-3 appropriates 2.33 cubic feet of water per second (cfs) from five wells constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer for rural water system use.

Minnehaha Community Water Corporation (MCWC) has filed a request to construct a new well to replace two of the existing wells. The new well is to be located in the E1/2 NE1/4 of Section 29, T104N, R49W. The request is not for any additional appropriation of water.

Upon review of the request and pursuant to SDCL 46-5-13.1, MCWC is authorized to construct this replacement well without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. A new water right permit will be necessary for any diversion greater than a combined total of 2.33 cfs from the four wells authorized by Water Right No. 2311-3.

The new well must be constructed in accordance with SD Well Construction Standards. Rule 74:02:04:28 is the applicable construction standard. The two existing wells may be used for monitoring purposes, however, when they are no longer needed for monitoring they must be plugged in accordance with SD Well Construction Standards. If you have any questions, please contact Jim Goodman at (605) 773-3352.

Very truly yours,

John Hatch, Chief Engineer
Water Rights Program
(605) 773-3 52

c: Dave Odens, Banner & Associates

enclosure

File No. 2311-3

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Minnehaha Community Water Corporation
47381 248 th Street
Dell Rapids, SD 57022-5365

DATE: December 15, 1999

TELEPHONE: 428-3374

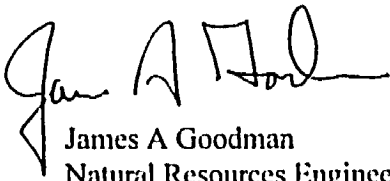
RE: Replacement well #1A

COMMENTS:

A new well called #1A was drilled by Layne Western (12/11/98) to replace existing wells #1 and #2 authorized by Water Right No. 2311-3. A copy of the well log is attached and the well has been completed in accordance with SD Well Construction Standards. During an inspection of Water Permit No. 5805-3 this information was obtained from the manager (John Buss) and engineer (Dave Odens) for Minnehaha Community Water.

RECOMMENDED ACTION:

Include this information in Water Right No. 2311-3. I do not think the license needs to be reissued because there is no substantial changes in the license. See the authorization for change in diversion for Water Right No 2311-3 dated April 22, 1998 in that permit file.



James A Goodman
Natural Resources Engineer

FEB-11-99 THU 9:30

LAYNE WESTERN CO INC

FAX NO. 4023592310

P. 02

REPLACEMENT - FOR #1, #2

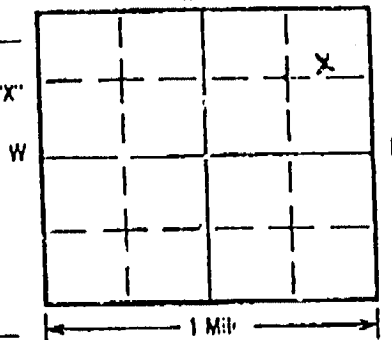
WELL #1A

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NE 1/4 NE 1/4 Sec 29 Twp 104 Rg 49
County Minnehaha

Please mark well location with an "X"



Well Completion Date

12-11-98

Well Owner: Minnehaha Community Water
Business Name: Minnehaha Community Water Operation
Address: 47581 248th Street
Dell Rapids, SD 57222-5305

WELL LOG:

DEPTH

FORMATION	FROM	TO
Top Soil	0	7
Gray sandy clay	7	14
Fine to medium sand, silty	14	16
Very coarse sand, with fines	16	29
Very coarse sand	29	35
	35	Gravel

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.): _____ ft from _____ (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
4956 LB/FT	12 IN	0 FT	22 FT	42 IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
API	64	16 lb./gal	0 ft	13 ft
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure: pressure grouted

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter: 24 IN Length: 8 FEET

Material: Stainless steel

Slot Size: 450 Set From: 22 Feet to: 30 Feet

Other Information: Bottom 1' is 0 skt

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If sp. wt. of material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

YES, How: 200 PPM

Laboratory sent to for water quality analysis

NO, Why Not? Chlorine

Division: Rapid River Plant Laboratory

STATIC WATER LEVEL: 22 1/2 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ in/h pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe: _____☒ Bailed _____☐ Other _____

Pumping Level Below Land Surface

28.6 ft. After 3 Hrs. pumped 345 GPM

23.4 ft. After 6 Hrs. pumped 221 GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # S13

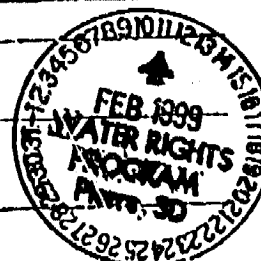
And this report is true and accurate.

Drilling firm: LAYNE WESTERN

Signature of license Representative: [Signature]

Signature of Well Owner or Equitable Property Holder: _____

Date: _____





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

November 9, 1999

Banner Associates, Inc.
Dave Odens
PO Box 298
Brookings, SD 57006-0298

Dear Mr. Odens:

In answer to question No. 1, MCWS is authorized to divert 8.33 cfs and 5240 acre feet annually from the "north and south" well fields combined. Also there is an existing Future Use of 783 acre feet annually from the "south" well field.

In answer to question No. 2, yes, the permits can be redefined into a single well field. This would take an application stating, including public notice, exactly what changes are needed.

In answer to question No. 3, MCWS may file an application for an additional well with a diversion rate and no additional volume of water. Again, this will require public notice.

In answer to question No. 4, there is a summary and copies of MCWS's water rights/permits included with this letter.

In answer to question No. 5, information is attached on drill hole data, aquifer testing and water quality.

PERMIT NO.	DIVERSION RATE	WELLS	VOLUME (A/F)
2311-3	2.33 CFS	#1 THRU #5	1687 AF
4838-3	FUTURE USE		
4838A-3	FUTURE USE		33 AF
5468-3	3.1 CFS	#6 THRU #10	2086 AF
5716-3	FUTURE USE		750 AF
5805-3	2.9 CFS	#11 AND #12	1467 AF
5063-3	SEE 5063A-3		
5063A-3	FUTURE USE		717 AF

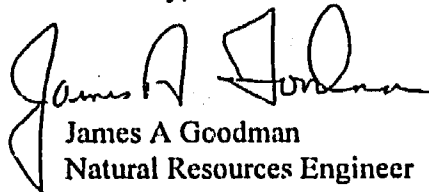
Banner Associates, Inc.
Dave Odens
November 9, 1999
Page 2

Comments on Chart:

Water Right Nos. 2311-3 and 5468-3 are licensed. Permit No. 5805-3 is not licensed yet, but will be for the amount shown on the chart. Water Right No. 5468-3 is a combination of 4838-3, 5152-3 and 5468-3 which allows 240 AF from well #10, and 1846 AF from wells #6 thru #9. Future Use Permit Nos. 4838-3 and 4838A-3 which originally allowed a reservation of 1740 AF has 33 AF remaining after withdrawals by Nos. 5805-3 (1467AF) and 5468-3 (240 AF). Water Right Nos. 2311-3 and 5468-3 are from the north well field and water permit No. 5805-3 and the Future Use permits are from the south well field. The total diversion rate from the north well field is 5.43 cfs and 3773 AF annually and the total diversion rate from the south well field is 2.9 cfs and 1467 AF, annually. The Future Use permits are both from the south well field area and are quantified at 783 AF annually. Future Use permit 5063A-3 authorizes 717 AF annually from a completely different area a couple of miles north of the existing north well field.

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

Sincerely,



James A Goodman
Natural Resources Engineer
Water Rights Program
(605) 773-3352

enclosures

47381 248TH STREET
DELL RAPIDS, SD 57022-5305
TELEPHONE (605) 428-3374 or (605) 529-5799
FAX (605) 428-3395

Eric Gronlund
DENR Water Rights Program
523 East Capitol Avenue
Pierre, SD 57501-3181

Thank you for your help in filling out the water rights application.

Permit # 2311-3 provided us with 1687 acre feet. We propose to use 1064 acre feet from this permit for new wells # 13 and 14 to account for the 1100 gallons a minute we can get out of them.

Sincerely,

Jim Auen
Chief Plant Operator

Approval of Additional Diversion Points

NAME: Minnehaha Community Water Corporation
ADDRESS: 47381 248th Street, Dell Rapids, SD 57022-5305
DATE: January 5, 2001 **COUNTY:** Meade **TELEPHONE:**

BACKGROUND:

Minnehaha Community Water Corporation (MCWC) holds a number of water rights/permits from the Sioux Falls Management Unit of the Big Sioux Aquifer.

Water Rights No. 2311-3 and 5468-3, combined, appropriate 5.42 cfs (3,773 acre feet of water annually) from ten wells in the north well field area located in the E½ NE¼ Section 29, T104N, R49W.

Water Permit No. 5805-3 appropriates 2.9 cfs (1,467 acre feet of water annually) from 2 wells in the south well field area located in the S½ SE¼ Section 29, T104N, R49W.

Water Permit No. 6164-3 appropriates 1.22 cfs from an additional well located in the SW¼ SE¼ Section 29, T104N, R49W. This permit did not authorize any increase in the annual volume of water that can be diverted.

The approval of Water Permit No. 6164-3 included combining of the two well fields and their diversions into one well field. The effect of this designation is to enable the Water Corporation to manage their withdrawals among the thirteen wells. The combined diversion authority currently held by MCWC is 9.55 cfs with a volume not to exceed 5,240 acre feet of water annually.

MCWC has requested authorization for two additional wells constructed into the same water source. The additional wells are to be located in the SW ¼ SE ¼ Section 29, T104N, R49W and the NE ¼ NE ¼ Section 32, T104N, R49W. The wells designated by MCWC as Well Nos. 13 and 14 are 37 and 47 feet deep, respectively. In making their request, MCWC states that many of the wells in the area originally designated as the north well field no longer produce the water that they originally did. The request states that they propose to divert at a rate of 1100 gpm from the two new wells with a total diversion of 1064 acre feet of water annually.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

The wells authorized under Water Right/Permit Nos. 2311-3, 5468-3, 5805-3 and 6164-3 are constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer. The two additional wells are 37 and 47 feet deep and also are constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer.

No additional appropriation of water is being requested. The request states that MCWC intends to develop a diversion capacity from the two wells of 1100 gpm but that this is to account for decreased production in some of their wells located in the area once designated as the north well field. The annual foot volume will not increase above the 5,240 acre feet authorized by the existing water rights.

- **Review of Existing Diversions**

A review was conducted of existing water rights and domestic wells on file within a mile radius of the two additional wells. A review of well completion records in Water Right files found four domestic/stock wells within a one mile radius that are constructed into the same water source. Authorization of this request locates MCWC's two additional wells in closer proximity to only one of these domestic wells. This review reflects only those well completion reports on file with the Water Rights Program and does not reflect the current status of the wells.

The only existing water right from the Sioux Falls Management Unit of the Big Sioux Aquifer other than those of MCWC is held by the city of Baltic. Baltic's water right is located approximately one mile south and is used for watering the football field. The City of Baltic is connected to MCWC.

The City of Sioux Falls also holds Future Use Permit No. 5523-3 reserving 4,050 acre feet of water from this water source. The northern edge of the city's future use area is within approximately one mile of MCWC's new well (No. 14) located in the NE ¼ NE ¼ Section 32, T104N, R49W.

CONCLUSION

- These additional wells do not appropriate additional water.
- The additional well is constructed into the Sioux Falls Management Unit of the Big Sioux Aquifer which is the same water source as the wells authorized by MCWC's existing water rights.
- Authorizing these additional wells should not adversely impact existing domestic wells or water rights.
- There has been no record of complaint on MCWC's diversion of water adversely impacting neighboring wells.

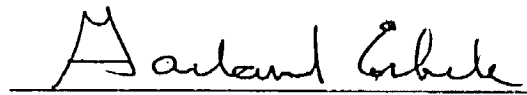
RECOMMENDED ACTION

Based on the above criteria, it is recommended that the additional diversion points be authorized under Water Right No. 2311-3.


Eric Gronlund
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

These additional diversion points do not increase the potential for adverse effects to existing diversions.


Garland Erbele, Chief Engineer
Water Rights Program

Sec. Also file for Permit 6164-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 17, 2001

2311-3

Jim Auen, Chief Plant Operator
Minnehaha Community Water Corporation
47381 248th Street
Dell Rapids SD 57022-5305

Dear Mr. Auen:

I am writing in regard to your request to authorize two additional wells under Water Right No. 2311-3.

Currently, the Water Corporation holds a number of water rights from the Sioux Falls Management Unit of the Big Sioux Aquifer.

No.	Diversion Rate	Acre-Feet	Location	Well Field Designation
2311-3 & 5468-3	5.43 cfs	3,773	E½ NE¼ Sec. 29, T104N, R49W	North
5805-3	2.9 cfs	1,467	S½ SE¼ Sec. 29, T104N, R49W	South
6164-3	1.22 cfs	No add'l	SW¼ SE¼ Sec. 29, T104N, R49W	Combined well fields
TOTAL	9.55 cfs	5,240 ac-ft		

The approval of Water Permit No. 6164-3 included combining of the two well fields and their diversions into one well field. The effect of this designation is to enable the Water Corporation to manage their withdrawals among the thirteen wells. The combined diversion authority currently held by MCWC is 9.55 cfs with a volume not to exceed 5,240 acre feet of water annually.

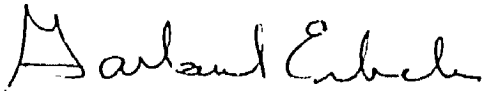
MCWC has requested authorization for two additional wells constructed into the same water source. The additional wells are to be located in the SW ¼ SE ¼ Section 29, T104N, R49W and the NE ¼ NE ¼ Section 32, T104N, R49W. The request states that diversion capability of the two additional wells is intended to be 1100 gallons per minute with an annual volume of 1,064 acre feet of water. However, the diversion from these new wells is to replace the decreased production from a few of MCWC's other wells. No additional water will be appropriated.

Upon review of the request and pursuant to SDCL 46-5-13.1, the additional wells are authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. A new water right permit will be necessary if the diversion from all of MCWC's wells is greater than 9.55 cfs or the annual volume exceeds 5,240 acre feet of water.

Based on the letter that accompanied your request, Well Nos. 1 and 2 do not have pumps installed and therefore may be subject to abandonment and/or forfeiture. Once both of the additional wells are operational, I suggest that a Water Rights staff person conduct an onsite visit of MCWC water wells in order to quantify all wells into one water right.

If you have any questions, please contact Eric Gronlund at (605) 773-3352.

Sincerely,

A handwritten signature in cursive script, appearing to read "Garland Erbele".

Garland Erbele, Chief Engineer
Water Rights Program



2311-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

APR 01 2005

6164-3 &
6455-3

Minnehaha Community Water Corporation
47381 248th ST
Dell Rapids SD 57022

Dear Sir:

Enclosed are Water License Nos. 6164-3 & 6455-3. This is the final water right document completing your process of obtaining a Water Right.

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.

Sincerely,

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

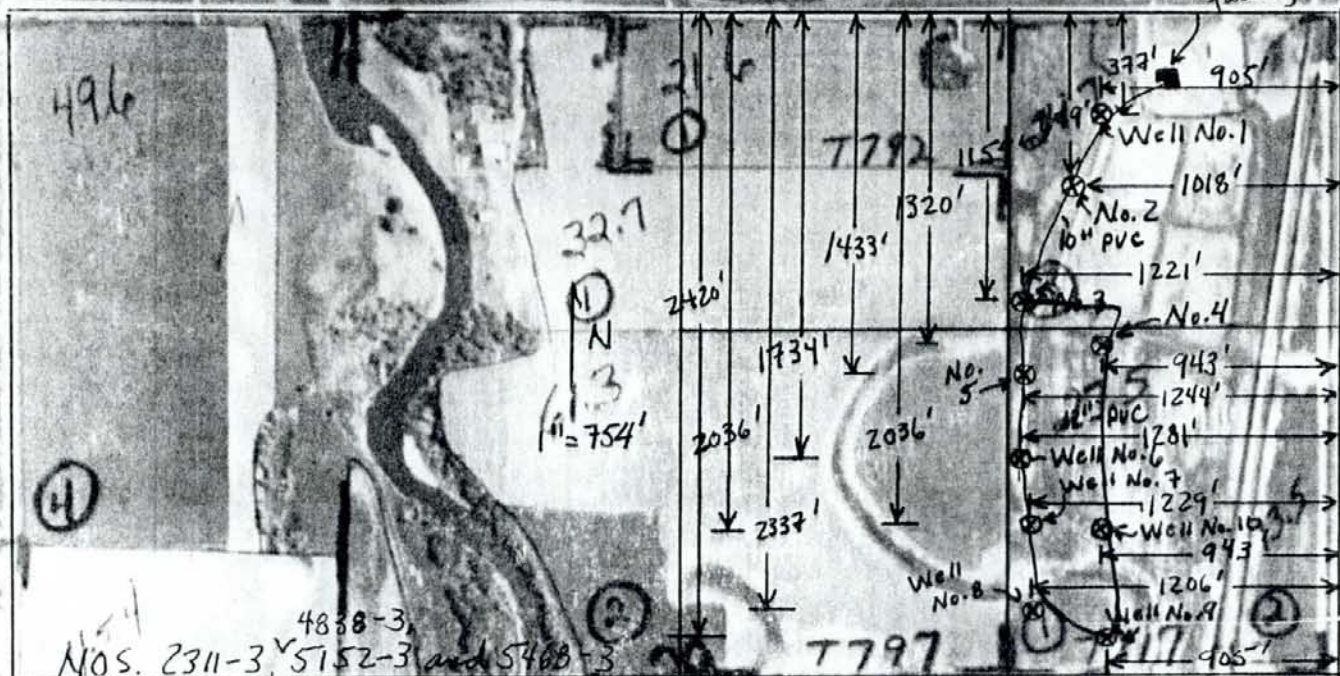
NOTE: The applicable portions of Nos. 2311-3, 5468-3 and 5805-3 are incorporated into Water License No. 6164-3.

enclosures

NOT TO SCALE

93-R

Treatment facility + Office



MINNEHAHA COMMUNITY
WATER CORPORATION

Drawn by: Gregory C. Johnston

Gregory C. Johnston
Hydrological Resources Engineer II

Water Rights Division
DENR

12/30/92
38.8

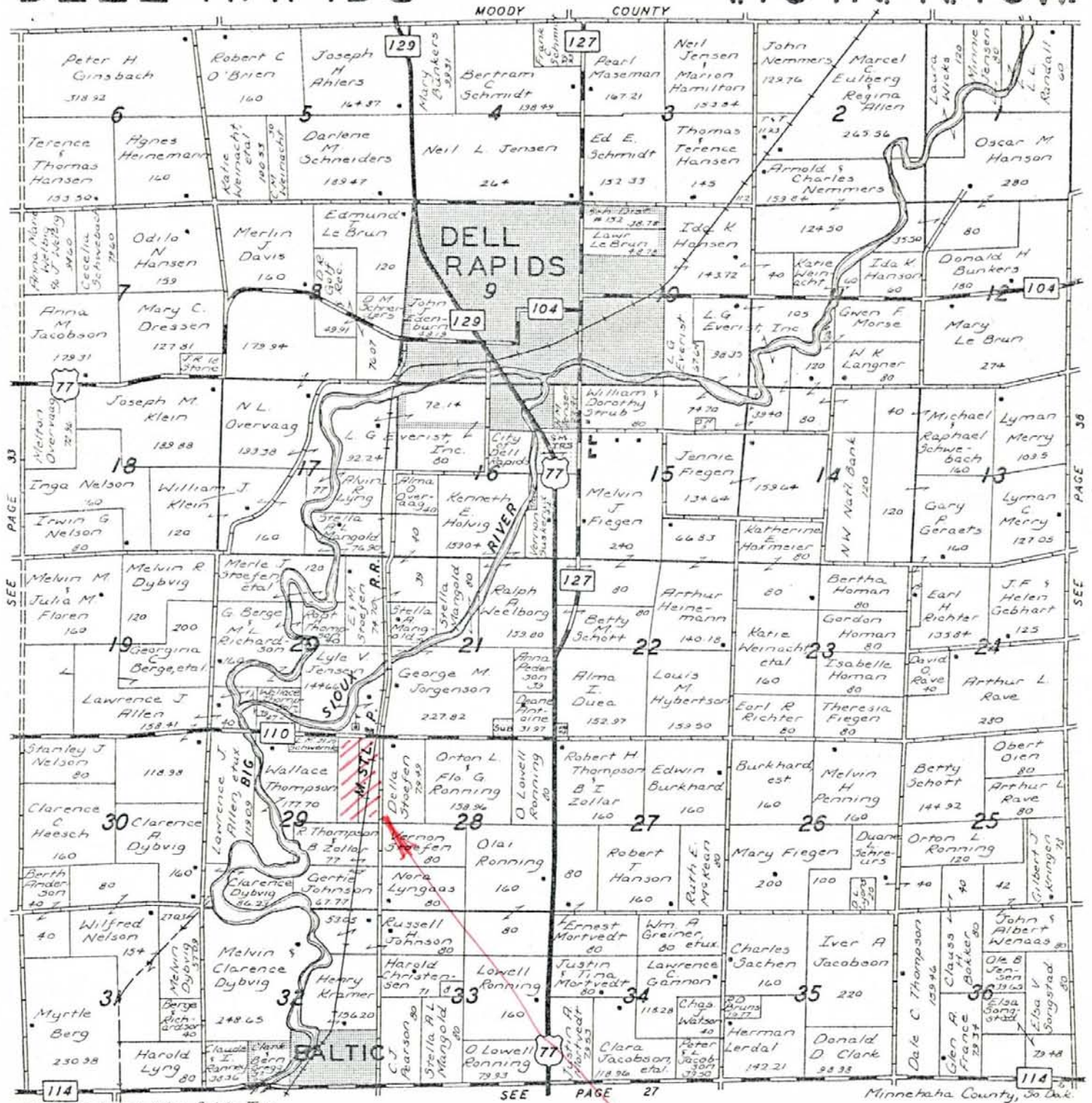
53.5 Wells No. 1 to 5
Covered under
Water Permit No.
2311-3

T796

T899

2311-3

T-9896



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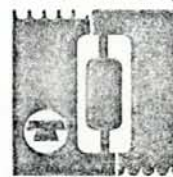
Water plant & well LOCATION

please
listen
BEFORE
you
dig



There may
be people
talking
down there!

Sioux Valley Telephone Company



525 Fourth Street
Dell Rapids, So. Dak.
57022
(605) 428-5421

Call Us for
Buried Cable
Location

4838-3 &
7704-1670-3
2311-3