

WATER PERMIT NO. 8346-3

Name of Applicant: Morris Inc.

Address: PO Box 1162, Pierre SD 57501

Phone: 280-0933

Amount of Water Claimed: 0.67 cfs (24.5 AF)

Total Acres: NA

Source of Water Supply: groundwater (one well)

Water to be used for: industrial use

County: Sully

Type of Waste Disposal System:

Location: 15 miles southeast of Onida

PRIORITY

Date Received: 4-4-18

Application/License Fee: \$ 700

Corrected Application Received:

Period of Annual Use: April 1 – November 30

Remarks: Also has Water Permit No. 7215-3 for same project

Diversion Point: SW 1/4 NW 1/4 Sec 15-T113N-

R75W

Land to be Irrigated: NA

Depth of Well: 25 feet deep

Well Driller:

Remarks:

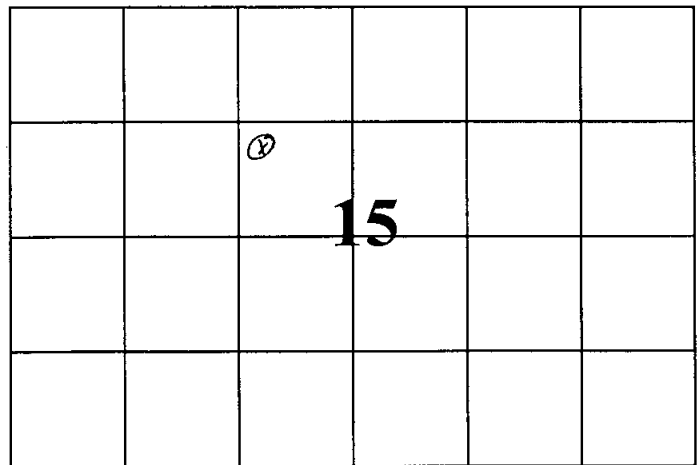
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 4-4-18

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 8346-3**

Date of first receipt of application April 4, 2018.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8346-3 to Morris Inc., PO Box 1162, Pierre SD 57501 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8346-3 appropriates 24.5 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well to be completed into the Highmore Blunt Aquifer (25-35 feet deep) located in the SE 1/4 NW 1/4 Section 15-T113N-R75W. The water is used to wash aggregate material and dust suppression for the plant located in the N 1/2 Section 15-T113N-R75W. Water is recycled by discharging to a settling pond prior to reuse. The operation is located approximately 13 miles southeast of Onida SD.
2. The water appropriated shall be used for the purpose of industrial use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: April 1 – November 30.
4. The date of approval of Permit No. 8346-3 is July 2, 2018.
5. The date from which applicant may claim right is April 4, 2018.
6. One-fifth of the construction is to be completed on or before January 2, 2021.
7. All construction is to be completed on or before July 2, 2023.
8. Water is to be put to beneficial use on or before July 2, 2027.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8346-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

(continued)

3. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Highmore Blunt aquifer.
4. Water Permit No. 8346-3 authorizes a total annual diversion of 24.5 acre foot of water.
5. Upon approval of Water Permit No. 8346-3 and successful completion of a new well authorized by Water Permit No. 8346-3, the existing well authorized by Water Permit No. 7215-3 shall be plugged in accordance with South Dakota Well Construction Standards.

WATER MANAGEMENT BOARD

By: _____

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

JUL 12 2018
date



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

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8346-3</u>	(office use only) Hydrologic Unit <u>10130105</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>Onida Watchman</u>	
	<u>Capitol Journal</u>	

RECEIVED
APR 04 2018
WATER RIGHTS PROGRAM

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

Check use(s) of water:

☐ Municipal	☐ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal
☐ Domestic (over 18 gpm)	☐ Industrial	☒ Other <u>Aggregate Mining</u>	

Type of Application:

(check one)

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

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

1. Name to Appear on Water Permit Morris, Inc.

Mailing Address Po Box 1162 Pierre SD 57501
(Address) (City) (State) (Zip Code)

Phone 605-223-2585 Mobile 605-280-0933 Email chad.hicks@morris-inc.com

2. Amount of water claimed 0.67 *CFS or 300 **GPM and 24.5 ***AF or 8 mill Gallons.
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use

3. Source of water supply Ground Water

4. Location of point of diversion SW 1/4 NW1/4 Section 15-T113N, R75W County Sully
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No

If "Yes," where will water be used? N 1/2 Sec 15-T113N-R75W
(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Sully6. Annual period during which water is to be used April 1 - November 30

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)

Water will be used to wash aggregate material.

I, Chad Hicks Aggregate Manager, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

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

b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 25-35' Depth to Top of Water Bearing Material 0 Depth to Water from Surface 5'

d) Distance to nearest domestic well on applicant's property _____ Property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) _____

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

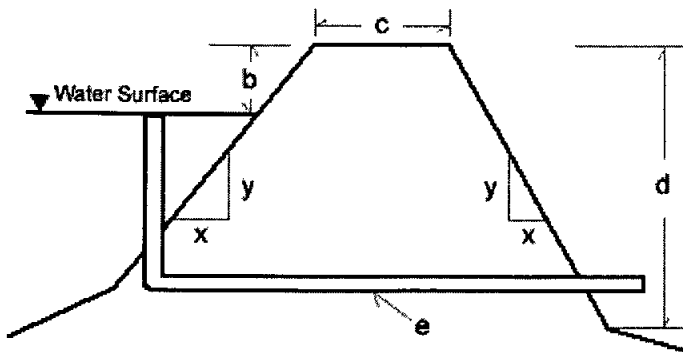
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





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Section 15
T113N
R75W

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date April 4, 20 18

RECEIVED OF Morris Inc. PO Box 1162 Pierre, SD 57501-1162

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

Fee for Application for Permit No. <u>8346-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8346-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	700 00

No. **08648**

By

Jeanne Goodman
Chief Engineer
JMG

8346-3

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Water Permit Application No. 8346-3, Morris INC

ADDRESS: PO Box 1162, Pierre SD 57501 COUNTY: Sully County

DATE: June 7, 2018 TELEPHONE: Chad Hicks – 280-0933

RE: well authorized by Water Permit No. 7215-3

COMMENTS:

Chad Hick, Aggregate Manager, returned my phone call.

I inquired regarding what Morris Inc.'s intentions are with the existing well authorized by Permit No. 7215-3 if Application No. 8346-3 is approved. I indicated that it is DENR's understanding the well was not drilled by a licensed well driller. Mr. Hicks indicated it was his understanding that the existing well authorized by Permit No. 7215-3 was drilled by a licensed driller from the Redfield area.

Mr. Hicks indicated that if Application No. 8346-3 is approved and the new well proves to be suitable it is Morris Inc.'s intention to abandon the existing well.

NAME: Eric Henderson



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

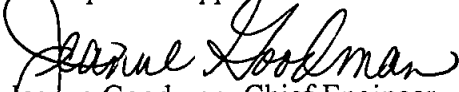
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8346-3, Morris Inc.**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 8346-3, Morris Inc., c/o Chad Hicks, Aggregate Manager, PO Box 1162, Pierre SD 57501.

The Chief Engineer is recommending APPROVAL of Application No. 8346-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8346-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Highmore Blunt aquifer.
4. Water Permit No. 8346-3 authorizes a total annual diversion of 24.5 acre foot of water.
5. Upon approval of Water Permit No. 8346-3 and successful completion of a new well authorized by Water Permit No. 8346-3, the existing well authorized by Water Permit No. 7215-3 shall be plugged in accordance with South Dakota Well Construction Standards.

See report on application for additional information.


Jeanne Goodman, Chief Engineer
June 11, 2018

REPORT TO THE CHIEF ENGINEER

Water Permit Application No. 8346-3

Morris, Inc.

June 1, 2018

Water Permit Application No. 8346-3 proposes to appropriate 24.5 acre-feet of water per year for industrial use at a maximum diversion rate of 0.67 cubic feet per second (cfs) from one well (25-35 feet deep) located in the SE ¼ NW ¼ Sec 15-T113N-R75W. This water is for the washing of aggregate material and dust suppression at a plant located in the N ½ Sec 15-T113N-R75W. The well for this application is to be completed into the Highmore Blunt aquifer and is located approximately 13 miles southeast of Onida in Sully County.

Morris, Inc. also holds Water Permit No. 7215-3 at this site for washing gravel, however at the time of inspection in 2016, future plans for the washing of gravel were unclear, and it was indicated that this permit may be subject to cancellation due to a period of non-use that exceeded three years. The results of the inspection indicate that the well that was constructed for Water Permit No. 7215-3 was not constructed by a licensed well driller, and Mr. Peterson at Morris, Inc. was informed that if this permit was to be used in the future, the permit qualification that the well needs to be constructed by a licensed well driller still applies. In the processing of this application, Mr. Hicks at Morris, Inc. stated that if this application for Water Permit No. 8346-3 is approved, the existing well for Water Permit No. 7215-3 will be abandoned.

AQUIFER: Highmore Blunt (HB)

HYDROGEOLOGY

The Highmore Blunt aquifer is composed of sand and gravels that were deposited as glacial outwash and alluvium (Hamilton, 1986). The Highmore Blunt aquifer has been identified as occurring in Hand, Hughes, Hyde and Sully Counties by Hedges et al. (1982). Hedges et al. (1982) estimated the Highmore Blunt aquifer as underlying 73,400 acres and containing an estimated 154,830 acre-feet of recoverable water in storage. Groundwater in the Highmore Blunt aquifer generally flows from the East to the West.

No water well completion report was submitted for the well that was drilled for Water Permit No. 7215-3, however when it was inspected in 2016, the water level was estimated to be 6 to 7 feet below the top of the casing (Water Rights, 2018a). This well was not constructed by a licensed well driller, so it is unknown if it meets the South Dakota Well Construction Standards, or the type of aquifer material it is completed into. Other nearby water well completion reports demonstrate the variable nature of this aquifer, being completed into layers consisting of sand, or gravel, and encountering layers of clay. These nearby water well completion reports show that the aquifer in this area is generally under unconfined conditions.

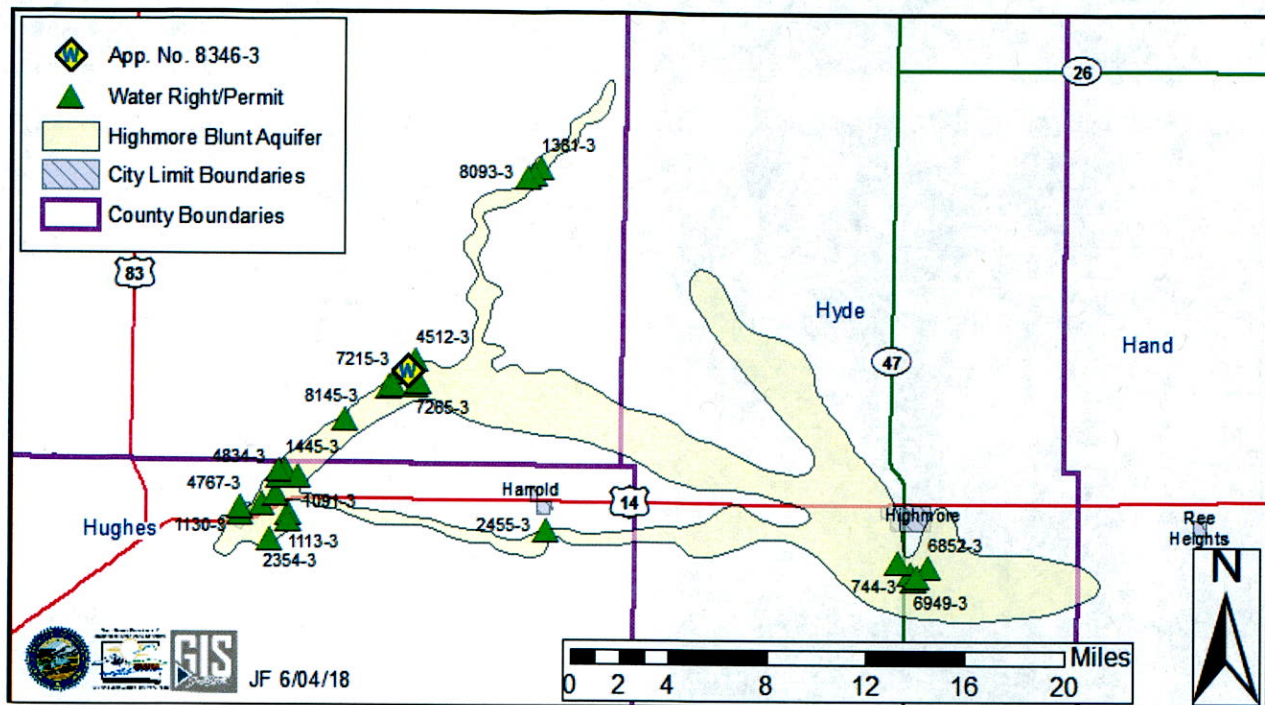


Figure 1. Map showing the location of the diversion and the distribution of Water Rights/Permits identified as using the Highmore Blunt aquifer (Water Rights, 2018a).

South Dakota Codified Law 46-2A-9

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

WATER AVAILABILITY

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older than or stratigraphically lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not take into consideration the balance of aquifer recharge and withdrawal. Here, the water source is not older or lower than the Greenhorn Formation and a water distribution system is not involved. Therefore, the balance of withdrawal and recharge must be considered.

Hydrologic Budget

Recharge

Recharge to the Highmore Blunt aquifer occurs primarily through direct infiltration of precipitation where the aquifer is at or near the land surface (Hamilton, 1986; Koch, 1980). The recharge to the Highmore Blunt aquifer has been estimated by Hedges et al (1985) and Hamilton (1986). Hedges et al (1985) estimated the recharge to unconfined and non-buried aquifers in

Eastern South Dakota to range between 2 and 5.6 inches per year through analysis of observation well data of similar aquifers. The Highmore Blunt aquifer was estimated to be on the lower end of this range. Hamilton (1986) estimated the recharge to the Highmore Blunt aquifer in Hughes County to be 900 acre-ft per year, or roughly 0.4 inches per year. Based upon the estimated recharge rates of 0.4 and 2 inches per year, applied over the entirety of the aquifer, it is likely that the estimated average annual recharge to the Highmore Blunt aquifer lies between 2,450 and 12,230 acre-ft per year.

Discharge

Discharge from the Highmore Blunt aquifer occurs through well withdrawals, evapotranspiration from areas where the aquifer is near the land surface, and natural discharge into Medicine Knoll Creek (Koch, 1980). Currently there are 20 Water Rights/Permits appropriating water from the Highmore Blunt aquifer (Water Rights, 2018a). Table 1 shows a summary of Water Rights/Permits with their appropriation and estimated annual expected use. The amount of water that can be expected to be withdrawn from non-irrigation users can be estimated by assuming water rights/permits limited by an annual volume will pump the entire volume appropriated annually, and water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.

Table 1: Water rights/permits authorized to withdraw water from the Highmore Blunt aquifer including estimated annual volume pumped for non-irrigation users (Water Rights, 2018a)

PERMIT NO.	NAME	COUNTY	STATUS	USE	CFS	ACRES	ESTIMATED ANNUAL PUMPAGE (AC-FT)
744-3	CITY OF HIGHMORE	HY	LC	MUN	1.66	-	RW
1091-3	WALTER HEIEN	HU	LC	IRR	2	154	-
1113-3	TRAVIS & DAVID MERCER	HU	LC	IRR	2.07	144.9	-
1130-3	CITY OF BLUNT	HU	LC	MUN	0.13	-	RW
1381-3	HARRY THOMAS	SU	LC	IRR	1	92	-
1445-3	RICHARD A HOWARD	HU	LC	IRR	2	153.8	-
1927-3	ROBERT F RICHARDS	SU	LC	IRR	1	92	-
2354-3	RONALD JONES	HU	LC	IRR	0.74	52	-
2455-3	TOWN OF HARROLD	HU	LC	MUN	0.16	-	RW
2828-3	CITY OF BLUNT	HU	LC	MUN	0.44	-	RW
4512-3	PETE LIEN & SONS INC	SU	LC	IND	0.26	-	112.9
4767-3	WILLIAM LEE FELLER	HU	LC	IRR	1.11	98	-
4834-3	HOWARD CHRISTENSON	HU	LC	IRR	5.14	360	-
6852-3	TODD COWAN	HY	LC	COM/LCO	0.044	-	19.3
6949-3	TODD COWAN	HY	LC	IRR	1.78	120	-
6950A-3	TODD COWAN	HY	PE	IRR	3.56	260	-
7215-3	MORRIS INC	SU	PE	IND	0.133	-	57.9
7265A-3	LEESMAN RANCH	SU	PE	IRR	7.47	523	-
8093-3	HARRY THOMAS	SU	LC	IRR	0.89	100	-
8145-3	DAN FANGER	SU	PE	IRR	3.31	232	-
SUMMARY							
20	No. of Water Rights/Permits	Non-Irrigation Estimated Annual Pumpage					190.1
		Acres Permitted for Irrigation					2,381.7
HU = Hughes, HY = Hyde, SU = Sully							
LC = Water Right, PE = Water Permit, RW = Connected to Rural Water							
COM = Commercial, DOM = Domestic, IND = Industrial, IRR = Irrigation, LCO = Livestock Confinement Operation, MUN = Municipal							

The municipal usage from the Highmore Blunt aquifer has been reduced significantly due to their rural water system connections. These Water Rights are maintained solely for emergency and backup purposes and do not contribute significantly to the hydrologic budget of the aquifer.

There are a number of domestic wells on file that withdraw water from the Highmore Blunt aquifer (Water Rights, 2018b), however the magnitude of their withdrawals is small, and since the introduction of rural water systems, many of these wells may no longer be in use. The annual quantity of water withdrawn for domestic uses is considered to not be significant to the overall hydrologic budget of the aquifer.

Due to different parts of the state having varying hydrologic conditions and soil types, the estimated annual use from irrigation water rights/permits is determined by looking at the historical reported usage of the aquifer. Table 2 shows a summary of the reported irrigation questionnaire data from 1979 to 2017, the most recent reported data. The average historic irrigation pumpage from the Highmore Blunt aquifer for 1979 through 2017 is 677 ac-ft/year.

Hydrologic Budget

The estimated withdrawals from the Highmore Blunt aquifer are 190.1 ac-ft/yr by non-irrigation users and 677 ac-ft/yr by irrigation. Including an estimated 24.5 ac-ft/yr from this application, if approved, the estimated average annual withdrawal from the Highmore Blunt aquifer would be 891.6 ac-ft/yr. The estimated annual recharge to the Highmore Blunt aquifer is between 2,450 and 12,230 ac-ft/yr. Due to the withdrawals being several times smaller than the recharge, there is a reasonable probability there is unappropriated water available from the Highmore Blunt aquifer for the proposed appropriation.

Table 2: Reported Irrigation Questionnaire data from 1979 to 2017 (Water Rights, 1980-2018)

Year	No. of Permits	Appropriation (ac-ft/yr)	Pumpage (ac-ft)
1979	25	16680	989
1980	25	16680	900
1981	25	16680	872
1982	19	11146.5	478.91
1983	20	12214.5	1094.38
1984	24	17965.5	760
1985	17	12600.9	877
1986	18	13110.9	1481
1987	17	11289.9	1083
1988	16	10689.9	1460.5
1989	14	5649.9	738
1990	14	5649.9	1002
1991	13	5515.6	876
1992	11	4345.6	694
1993	11	3556.6	464
1994	11	3916.6	913.64
1995	11	3916.6	811.81
1996	11	6916.6	900.2
1997	11	3916.6	304
1998	11	3916.6	947.04
1999	11	3916.6	496.28
2000	9	2731.6	326.14
2001	9	2731.6	298.3
2002	9	2731.6	620.75
2003	7	2262.1	543.56
2004	8	2382.1	623.99
2005	8	2382.1	464.9
2006	8	2382.1	439.93
2007	8	2382.1	403.04
2008	10	3442.1	404.94
2009	10	3442.1	468.88
2010	10	3442.1	291.67
2011	10	3442.1	209.91
2012	12	4572.1	498.61
2013	12	4272.1	556.81
2014	12	4272.1	743.76
2015	13	4416.1	477.98
2016	13	4816.1	488.54
2017	13	4816.1	404.86
Min	7	2,262.1	209.91
Max	25	17,965.5	1,481
Avg	13	6,441	677

Observation Well Data

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program currently monitors 14 observation wells completed in the Highmore Blunt aquifer (Water Rights, 2018c). The nearest observation wells are SU-65A, located 0.5 miles to the southwest of the proposed well location, and SU-65B, located 2.9 miles to the southeast of the proposed well location. The locations of the Highmore Blunt aquifer observation wells are shown in Figure 2, and the hydrographs for the five nearest observation wells are shown in Figure 3.

These observation well hydrographs are representative of the Highmore Blunt aquifer. The hydrographs show that the aquifer responds well to hydrologic conditions, recharging during wetter periods and declining during drier periods. The observation well measurements show that the effects from pumping are temporal, and that the aquifer generally returns to pre-pumping conditions. Overall, the water levels observed at these observation wells have remained steady with a very slight rise over the period of record. The observation well data indicates that there is a reasonable probability that there is unappropriated water available from the Highmore Blunt aquifer.

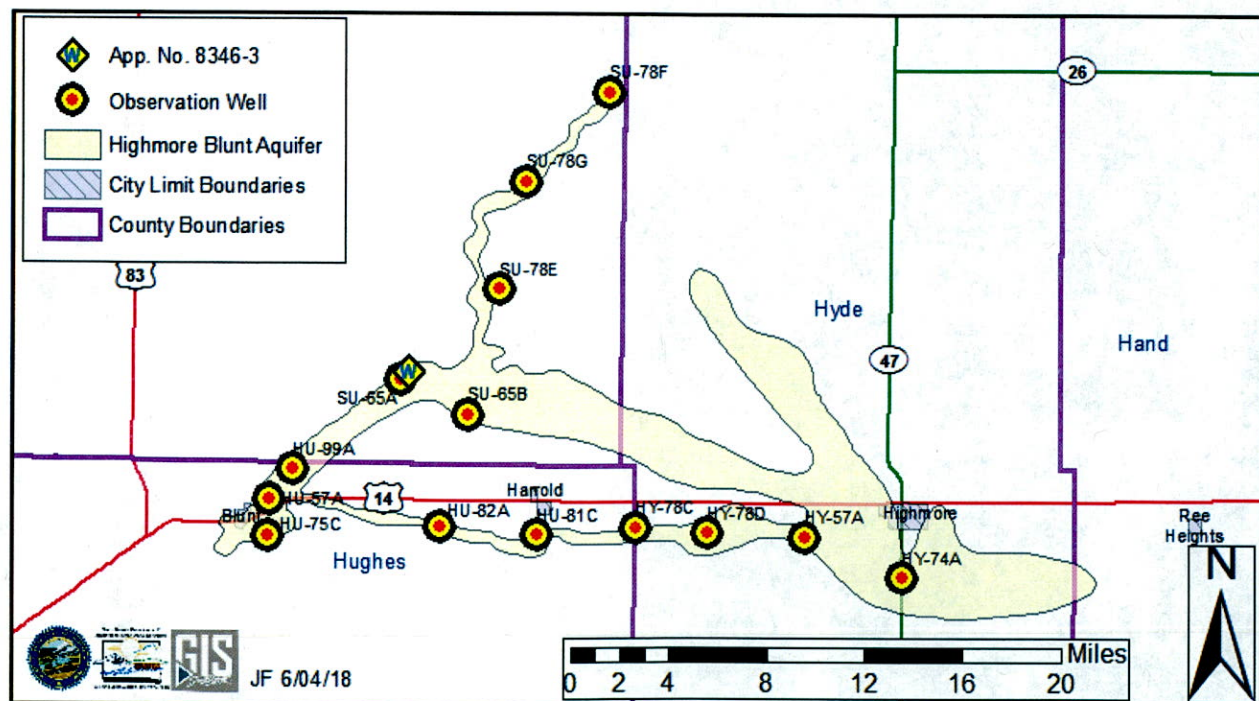


Figure 2. Map showing the location of observation wells in the Highmore Blunt aquifer (Water Rights, 2018c)

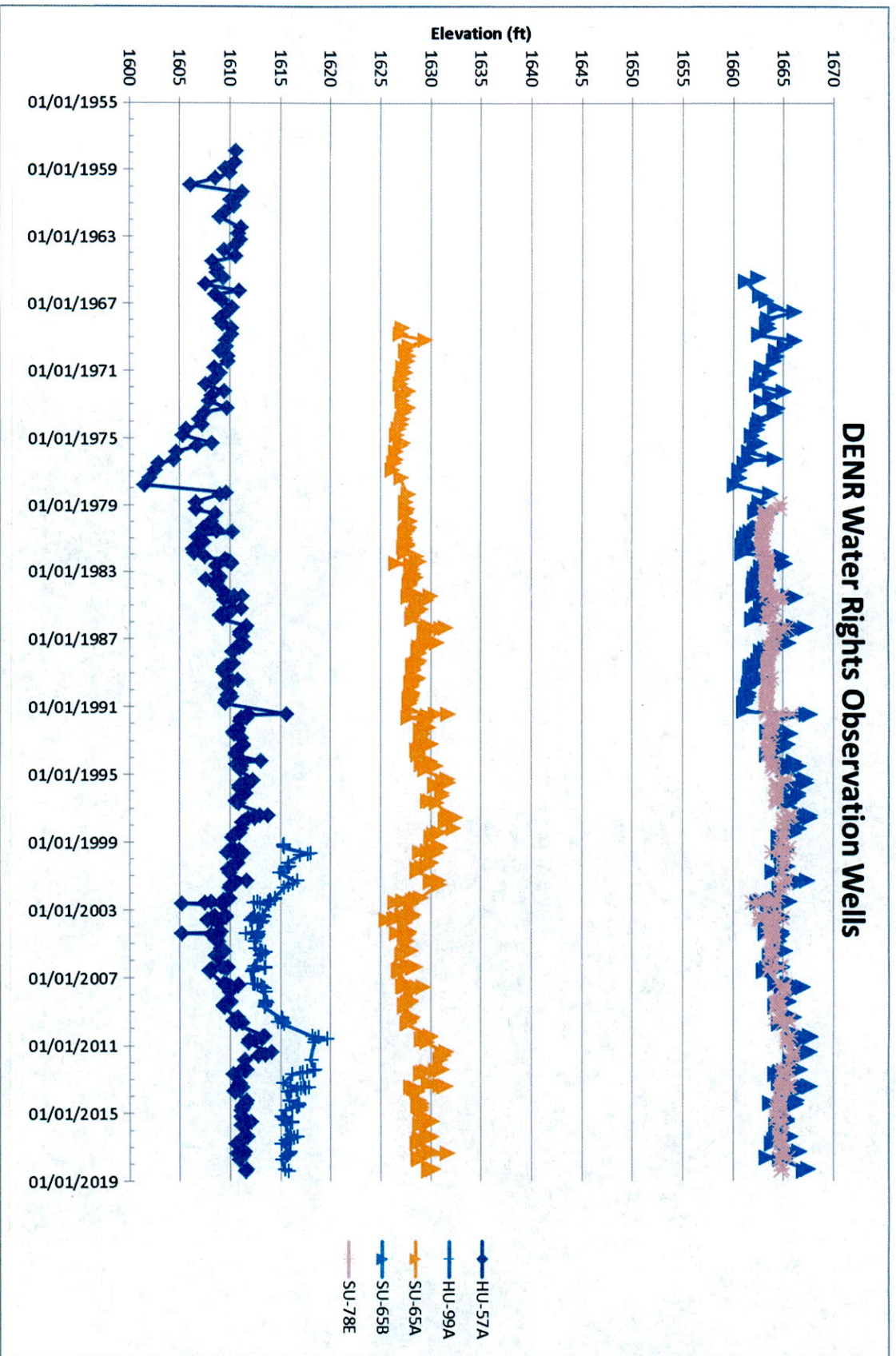


Figure 3: Hydrographs for Observation Wells HU-57A, HU-99A, SU-65A, SU-65B, and SU-78E (Water Rights, 2018c)

EXISTING WATER RIGHTS

There are 20 water rights/permits appropriating water from the Highmore Blunt aquifer (Water Rights, 2018a). The location of the diversion points for water rights/permits authorized to withdraw water from the Highmore Blunt aquifer are shown in Figure 1. The nearest water rights/permits to this application, not including Water Permit No. 7215-3 held by Morris, Inc., are located just over half a mile to the northwest and east-southeast. These are held by Pete Lien & Sons, Inc., and the Leesman Ranch.

Drawdown from well withdrawals within the Highmore Blunt aquifer is generally not significant at distances far from the pumping well due to the unconfined nature of the aquifer. Given the relatively small scale of drawdown, this application, if approved, is unlikely to adversely impact existing water rights.

The nearest homesteads that may rely on domestic wells are located over a mile away from the proposed diversion point. There has not been a history of well interference issues in the Highmore Blunt aquifer. This application, if approved, is not expected to adversely impact nearby adequate wells.

An adequate well has been defined in Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) as:

“a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet”.

The Highmore Blunt aquifer is a relatively thin aquifer in some areas. While the average annual withdrawal would not exceed the average annual recharge to the aquifer, conditions may occur when the withdrawal exceeds recharge. When this occurs, water will be removed from storage, reducing the saturated thickness of the aquifer. If the saturated thickness is reduced to the extent that water rights/permits can no longer pump at their developed or “historically established” diversion rates, this may be considered an adverse impact.

CONCLUSIONS

1. Water Permit Application No. 8346-3 proposes to use 24.5 acre-feet of water annually for the industrial uses of aggregate washing and dust suppression from a well (25-35 feet deep) to be completed into the Highmore Blunt aquifer at a maximum diversion rate of 0.67 cubic feet per second.
2. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Highmore Blunt aquifer.

3. Based on the low annual diversion rate and the distance to other users, there is a reasonable probability that the diversion rate proposed by this application will not adversely impact adequate wells for existing water rights and domestic use.



John Farmer
SD DENR – Water Rights Program

REFERENCES

- Hamilton, L.J. 1986. Water Resources of Hughes County, South Dakota. Water-Resources Investigations Report 84-4195. U.S. Geological Survey.
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- Water Rights. 2018b. Well Completion Report Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2018c, "Observation Well Database", SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 11, 2018 10:16 AM
To: 'chad.hicks@morris-inc.com'
Subject: Water Permit Application No. 8346-3
Attachments: 8346-3.pdf

Mr. Hicks,

Attached is the report, recommendation and instructions regarding the public notice for Water Permit Application No. 8346-3, Morris Inc. Paper copy is being mailed today.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



RECEIVED

JUL 09 2018

AFFIDAVIT OF PUBLICATION

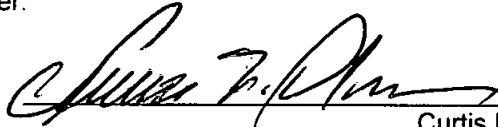
WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA)
COUNTY OF SULLY)

Curtis R. Olson of said County and State, being first duly sworn on his oath, says that the **ONIDA WATCHMAN** is a weekly newspaper of general circulation, published in the English language in the City of Onida, in said County and State, by said Curtis R. Olson, and has been admitted to the United States mail under the second class mailing privilege at all times hereinafter mentioned, and that all of said times has had more than 200 bona fide paid subscribers; that I, the undersigned, am the publisher of said newspaper, in charge of the legal/display advertising department thereof, and have personal knowledge of all the facts stated in the affidavit; and that the advertisement headed:

**NOTICE OF APPLICATION NO. 834603 TO
APPROPRIATE WATER**

A printed copy of which is hereto attached, was printed and published in said newspaper for **ONE** successive issues, the first publication made **2018** the **21st** day of **JUNE**, and the last publication on **2018** the -- day of --, and that **\$27.07** being the full amount of the fee for publication of the annexed notice insured solely to the benefit of the publisher of said newspaper; that no arrangements or understanding for a revision thereof has been made with any person, and that no part thereof has been agreed to be paid to any other person whatsoever.



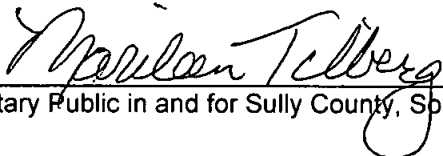
Curtis R. Olson

Subscribed and Sworn to me this

5th Day of July, 2018

(SEAL)

My commission expires April 24, 2022



Notary Public in and for Sully County, South Dakota

**NOTICE OF
APPLICATION**

NO. 8346-3 to

Appropriate Water

Notice is given that Morris Inc., c/o Chad Hicks, PO Box 1162, Pierre SD 57501 has filed an application for a water permit to appropriate 24.5 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well to be completed into the Highmore Blunt Aquifer (25-35 feet deep) located in the SE 1/4 NW 1/4 Section 15-T113N-R75W. The water is for industrial use to wash aggregate material and dust suppression for the plant located in the N 1/2 Section 15-T113N-R75W. Water is recycled by discharging to a settling pond prior to reuse. The operation is located approximately 13 miles southeast of Onida SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8346-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 1, 2018.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing

4-17-2018
10:10
10:10

SD DENR Water Rights Program
523 E Capitol
Pierre SD 57501

or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Steven M. Pirner, Secretary,
Department of Environment
and Natural Resources.

Published 06-21-2018 at
the total approximate cost of
\$27.07.

RECEIVED

JUN 27 2018

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SSI, Marylin Baker

certify that the attached printed Notice was taken

from the Capital Journalprinted and published in PierreCounty of Hughes and

state of South Dakota. The notice was published

in the newspaper on the following date:

6-21-18Cost of Printing [#] 31.08Marylin Baker
(Signature)Business Office Asst.
(Title)6-25-18
(Date Signed)

SNAXLP 16423
11dy 6/21

NOTICE OF
APPLICATION NO. 8346-3
to Appropriate Water
Notice is given that Morris
Inc., c/o Chad Hicks, PO
Box 1162, Pierre SD 57501
has filed an application for
a water permit to appropri-
ate 24.5 acre-feet of water
annually at a maximum
pump rate of 0.87 cubic
feet of water per second
from one well to be com-
pleted into the Highmore
Shut Aquifer (25-35 feet
deep) located in the SE 1/4
NW 1/4 Section 15-T113N-
R75W. The water is for in-
dustrial use to wash aggre-
gate material and dust sup-
pression for the plant locat-
ed in the N 1/2 Section 15-
T113N-R75W. Water is re-
cycled by discharging to a
settling pond prior to reuse.
The operation is located
approximately 13 miles
southeast of Onida SD.
Pursuant to SDCL 46-2A-
2, the Chief Engineer rec-
ommends APPROVAL of
Application No. 8346-3 with
qualifications because 1)
unappropriated water is
available, 2) existing rights
will not be unduly im-
paired, 3) it is a beneficial
use of water, and 4) it is in
the public interest. The
Chief Engineer's recom-
mendation with qualifica-
tions, the application, and
staff report are available at
<http://dwr.sd.gov/public> or
contact Eric Gronlund for
this information, or other in-
formation, at the Water
Rights Program address
provided below.
Any person interested in
opposing or supporting this
application or recommen-
dation must file a written
petition with BOTH the ap-
plicant and Chief Engineer.
The applicant must file a
petition if contesting the
Chief Engineer's recom-
mendation. The Chief Engi-
neer's address is "Water
Rights Program, Post
Building, 623 E. Capitol,
Pierre SD 57501 (605 773-
3352)" and the applicant's
mailing address is given
above. A petition filed by ei-
ther an interested person or
the applicant must be filed
by July 1, 2018.
The petition may be infor-
mal, but must include a
statement describing the
petitioner's interest in the
application, the petitioner's
reasons for opposing or
supporting the application,
and the signature and mail-
ing address of the petitioner
or the petitioner's legal
counsel, if legal counsel is
obtained.
If the applicant does not
contest the recommenda-
tion of the Chief Engineer
and no petition to oppose
the application is received,
the Chief Engineer shall act
on the application pursuant
to the recommendation with
no hearing held before the
Water Management Board.
If a petition opposing the
application or contesting
the recommendation is
filed, then a hearing will be
scheduled and the Water
Management Board will
consider this application.
Notice of the hearing will be
given to the applicant and
any person filing a petition.

Steven M. Pimer,
Secretary,
Department of Environment
and Natural Resources

Published once at the total
approximate cost of \$31.08.

NOTICE OF APPLICATION NO. 8346-3 to Appropriate Water

Notice is given that Morris Inc., c/o Chad Hicks, PO Box 1162, Pierre SD 57501 has filed an application for a water permit to appropriate 24.5 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well to be completed into the Highmore Blunt Aquifer (25-35 feet deep) located in the SE 1/4 NW 1/4 Section 15-T113N-R75W. The water is for industrial use to wash aggregate material and dust suppression for the plant located in the N 1/2 Section 15-T113N-R75W. Water is recycled by discharging to a settling pond prior to reuse. The operation is located approximately 13 miles southeast of Onida SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8346-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 1, 2018.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 11, 2018 10:22 AM
To: Onida Watchman (watchman@venturecomm.net)
Subject: 8346-3, Morris Inc.
Attachments: 8346-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on June 21, 2018.

Morris Inc. c/o Chad Hicks, PO Box 1162, Pierre SD 57501(605 223-2585 or 605 280-0933) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 11, 2018 10:08 AM
To: legals@capjournal.com
Subject: 8346-3, Morris Inc.
Attachments: 8346-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on June 21, 2018.

Morris Inc. c/o Chad Hicks, PO Box 1162, Pierre SD 57501(605 223-2585 or 605 280-0933) has been notified to contact you to authorize publication and arrange for payment.

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Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

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

June 11, 2018

Morris Inc.
c/o Chad Hicks
PO Box 1162
Pierre SD 57501

Dear Mr. Hicks:

Water Permit Application No. 8346-3 for industrial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Onida Watchman printed at Onida SD (Ph # 605 258-2604) and the Capital Journal printed at Pierre SD (Ph # 605 224-7301). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JUL 12 2018

Morris Inc.
Chad Hicks, Aggregate Manager
PO Box 1162
Pierre SD 57501

Dear Mr. Hicks:

Enclosed is Water Permit No. 8346-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

A handwritten signature in cursive script that reads "Jeanne Goodman".

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

enclosures