

WATER PERMIT NO. 2778-2

Name of Applicant: **Western Construction, Inc.**

Address: **PO Box 771, Rapid City SD 57709**

Phone: **605 342-3834**

Amount of Water Claimed: **0.17 cfs**

Total Acres: **NA**

Source of Water Supply: **groundwater (1 well)**

Water to be used for: **industrial and commercial**

County: **Pennington**

Type of Waste Disposal System:

Location: **1 mile north of Rapid City**

PRIORITY

Date Received: **11-13-17**

Application/License Fee: **\$ 700**

Corrected Application Received:

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

Remarks:

Diversion Point: **SW 1/4 NE 1/4 Sec 22-T2N-R8E**

Land to be Irrigated:

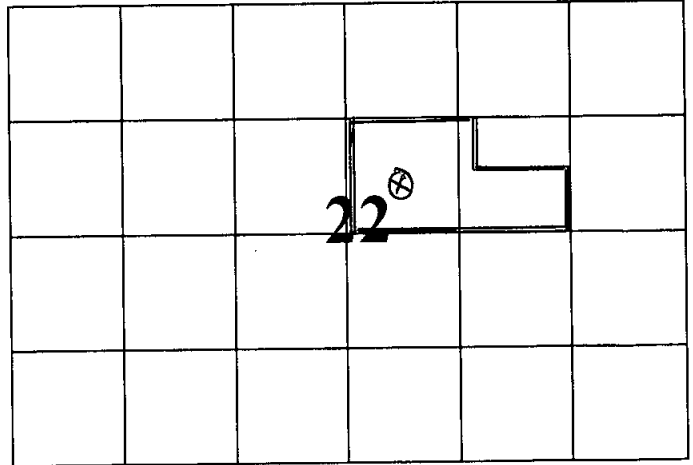
Depth of Well: **1750 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:



Reviewed and the Number Assigned on: **11-13-17**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 2778-2

Date of first receipt of application November 13, 2017.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2778-2 to Western Construction Inc., c/o Thomas E Lien Jr, PO Box 771, Rapid City SD 57709 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. 2778-2 appropriates 31 acre-feet of water annually at a maximum pump rate of 0.17 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (1,750 feet deep) located in the SW 1/4 NE 1/4 Section 20-T2N-R8E. Water may be diverted directly or stored in a dugout located in the S 1/2 NE 1/4 Section 20 less lot 1 of Blue Marlin Est; all in T2N-R8E which is approximately one mile north of Rapid City SD. Water may be used to fill tanker trucks and hauled to work sites throughout the area.
2. The water appropriated shall be used for the purpose of industrial and commercial 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: January 1 – December 31.
4. The date of approval of Permit No. 2778-2 is February 5, 2018.
5. The date from which applicant may claim right is November 13, 2017.
6. One-fifth of the construction is to be completed on or before August 5, 2020.
7. All construction is to be completed on or before February 5, 2023.
8. Water is to be put to beneficial use on or before February 5, 2027.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

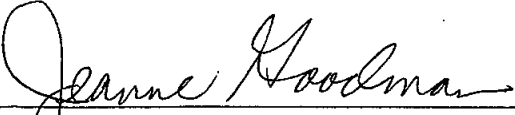
QUALIFICATIONS

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. 2778-2 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 Inyan Kara aquifer.
4. Water Permit No. 2778-2 authorizes a total annual diversion of 31.0 acre feet of water.

WATER MANAGEMENT BOARD

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

FEB 12 2018
date



RECEIVED

NOV 13 2017

WATER RIGHTS
PROGRAM

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only)	
	No. <u>2778-2</u>	Hydrologic Unit <u>10120110</u>
	Basin <u>Upper Cheyenne</u>	
	Newspaper <u>Rapid City Journal</u>	

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 _____	

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.)

N/A

1. Name to Appear on Water Permit Western Construction, Inc.Mailing Address P.O. Box 771 Rapid City SD 57709
(Address) (City) (State) (Zip Code)Phone 605-342-3834 Mobile _____ Email tlien@dakotamill.com2. Amount of water claimed 0.17 *CFS or 75.0 **GPM and 31 ***AF or 10 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 Inyan Kara Formation (SW 1/4 NE 1/4) Section 204. Location of point of diversion 1 well in S1/2NE1/4 less lot 1 of Blue Marlin Est. T2N,R8E County Pennington
(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 ☐ NoIf "Yes," where will water be used? Adjoining counties as work requires

(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Pennington and adjoining counties.6. Annual period during which water is to be used January 1 to December 31

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 on site as potable and non potable. Will also be used for potable or nonpotable purposes off site. Water shall be stored in a dugout on site as necessary.

I, Thomas E. Lien Jr.

President

, 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 n/a Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 1750' Depth to Top of Water Bearing Material 1500' Depth to Water from Surface 100'

d) Distance to nearest domestic well on applicant's property n/a Property owned by others 0.5 miles

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 150'L, 150'W Depth 8.0'

b) Depth to water (ground surface to water level) 6.0'

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)

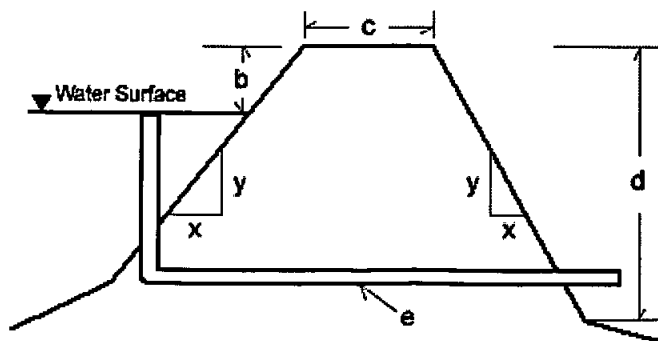
Upstream _____

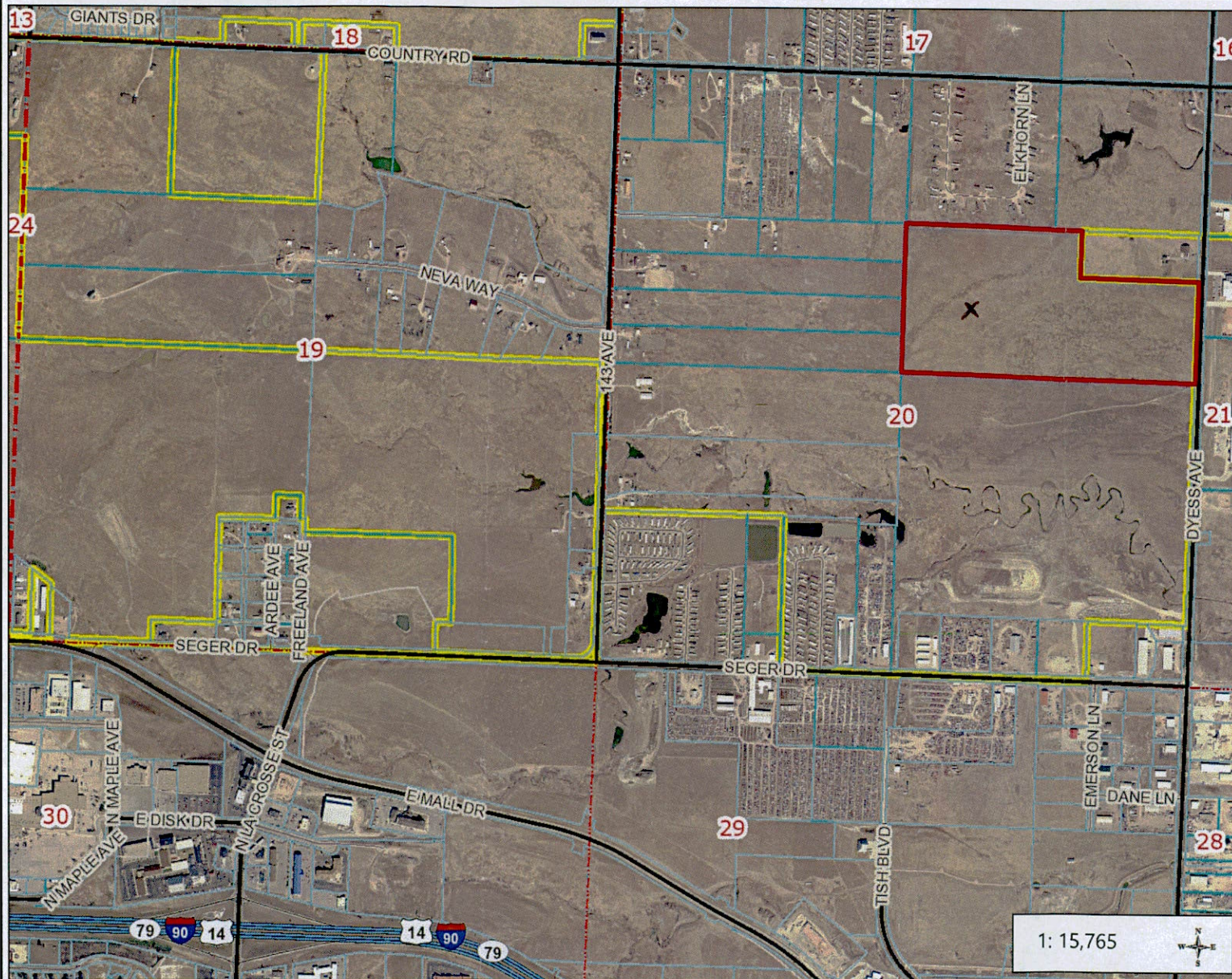
Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





Legend

Roads

- Interstate
- US highway
- SD highway
- County highway
- Main road
- Minor arterial
- Collector
- Ramp
- Paved road
- Unpaved road
- Unimproved road
- Trail
- Airport Runway
- Not yet coded

Section Lines 0-25k

- 0
- 7

Tax Parcels

Lot Lines

- <Null>
- Lot Line
- Parcel Line

Map Notes:

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

2,627.5 0 1,313.74 2,627.5 Feet

NAD_1983_2011_StatePlane_South_Dakota_South_FIPS_4002_Ft_US
© Rapid City-Pennington County GIS Division

1: 15,765



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date NOVEMBER 13, 2017

RECEIVED OF Western Construction, Inc. PO Box 771 Rapid City 57709

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

Fee for Application for Permit No. <u>2778-2</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>2778-2</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. **08376**

By

Jeanne Goodman
Chief Engineer

vm

2016

Enter Filing Year
 Secretary of State Office
 500 E Capitol Ave
 Pierre, SD 57501
 (605)773-4845

ANNUAL REPORT DOMESTIC CORPORATION

SDCL 59-11-24, 24.1

Please Type or Print Clearly In Ink

FILING FEE: \$50.00 Make check payable to SECRETARY OF STATE

FILE DATE 10/17/2016

RECEIPT NO 464720

1. Corporate ID and Name:

DB054052

Enter Corporate ID

WESTERN CONSTRUCTION, INC.

Enter Corporate Name

2. The jurisdiction under whose law it is formed SOUTH DAKOTA

3. The address of the principal executive office (business address).

2460 DEADWOOD AVENUE	RAPID CITY	SD	57702-0348
Actual Street Address or Rural Route Box Number	City	State	ZIP+4

Mailing Address, if Different from Street Address	City	State	ZIP+4
---	------	-------	-------

4. The name of the South Dakota Registered Agent

Agent Name: BARTON R. BANKS

224 FOUNDERS PARK	RAPID CITY	SD	57701
Actual Street Address or Rural Route Box Number in This State	City	State	ZIP+4
P.O. BOX 2340	RAPID CITY	SD	57709-2340

Mailing Address in This State, if Different from Street Address	City	State	ZIP+4
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5. The names and business addresses of its principal officers and directors (governors). If, pursuant to SDCL 47-1A-732(1), the board of directors has been eliminated, list the names of the shareholders.

☒	THOMAS E LIEN, JR.	2460 DEADWOOD AVENUE	RAPID CITY	SD	57702
	President	Actual Street Address	City	State	ZIP+4

☒	BARTON R BANKS	224 FOUNDERS PARK	RAPID CITY	SD	57702
	Secretary	Actual Street Address	City	State	ZIP+4

☒	THOMAS E LIEN, JR.	2460 DEADWOOD AVENUE	RAPID CITY	SD	57702
	Treasurer	Actual Street Address	City	State	ZIP+4

☐					
	Director	Actual Street Address	City	State	ZIP+4

☒	THOMAS E LIEN, SR	224 FOUNDERS PARK	RAPID CITY	SD	57702
	Vice President	Actual Street Address	City	State	ZIP+4



**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. 2778-2, Western Construction**

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. 2778-2, Western Construction, c/o Thomas E Lien, PO Box 771, Rapid City SD 57709.

The Chief Engineer is recommending APPROVAL of Application No. 2778-2 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. 2778-2 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 Inyan Kara aquifer.
4. Water Permit No. 2778-2 authorizes a total annual diversion of 31.0 acre feet of water.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
January 18, 2018

REPORT ON APPLICATION NO. 2778-2

For Western Construction, Inc., c/o Thomas E. Lien Jr.

January 11, 2018

Western Construction, Inc. has filed Water Permit Application No. 2778-2 for a water permit to appropriate 31 acre-feet of water annually at a maximum pump rate of 0.17 cubic feet of water per second (cfs) from one well to be completed into the Inyan Kara aquifer (approximately 1,750 feet deep) located in the SW¼ NE¼ Section 20, T2N-R8E. Water may be diverted directly or stored in a dugout for industrial and commercial use located in the S½ NE¼ Section 20 less lot 1 of Blue Marlin Est; all in T2N-R8E approximately one mile north of Rapid City in Pennington County, South Dakota. Water may be used on-site or used to fill tanker trucks and hauled to work sites throughout the area.

AQUIFER – INYAN KARA (INKR)

The Inyan Kara aquifer consists of the Fall River Formation and the underlying Lakota Formation. The Fuson Shale sometimes separates these two formations, but it is often difficult to differentiate the bottom of the Fall River from the top of the Lakota. The two formations are probably hydraulically connected and therefore can be considered a single aquifer. The aquifer is areally extensive, underlying over 36,000 square miles of western South Dakota (Allen and others, 1984). The aquifer underlies 1,245,440 acres and contains an estimated 23,352,000 acre-feet of recoverable water in storage in Pennington County alone (Allen and others, 1984). In general, the Inyan Kara aquifer consists of interbedded sandstone (thin bedded to massive), siltstone, and shale. This proposed well site is approximately 2 miles from the Inyan Kara outcrop (Peter, 1985). The top of the Inyan Kara is expected to be approximately 1400 feet below grade (Redden, 1994). The Inyan Kara is estimated to be 250 feet thick at this site (Allen and others, 1984). The thickness of the Inyan Kara aquifer does however, vary considerably within short distances. The Inyan Kara is under confined conditions in this area, and the static water level of the well is expected to be less than 100 feet below grade (Strobel and others, 2000).

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

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

WATER AVAILABILITY

The availability of unappropriated water 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 is used for a water distribution system, the Board need not take into consideration the balance of aquifer recharge and withdrawal. The Inyan Kara aquifer is older or stratigraphically lower than the Greenhorn Formation, however this proposed use is not for a water distribution system. Therefore recharge/withdrawals from the aquifer was reviewed.

Recharge

Recharge to the Inyan Kara aquifer is through infiltration of precipitation where it outcrops around the Black Hills, and in Central South Dakota there is some evidence of leakage from the underlying Paleozoic aquifer (Carter and Driscoll, 2001). The average annual recharge to the Inyan Kara aquifer has not been quantified, however the precipitation component of the recharge from the Black Hills outcrop area was estimated to be 11,600 acre-feet per year by Carter and Driscoll (2001) using data from 1950-1998.

Discharge

Currently there are 184 water rights/permits appropriating water from the Inyan Kara aquifer in South Dakota, with one future use permit for the city of New Underwood, SD, and one deferred permit application for Powertech (USA) Inc. requesting 274.2 acre-feet annually at a maximum pump rate of 18.938 cfs (Water Rights, 2018a). Buhler (2012) estimated the average annual withdrawal from the Inyan Kara aquifer in South Dakota to be 10,700 acre-feet per year. This estimate was based on: 1.) annual water use reported in the latest public water system survey for municipal, suburban housing development, and rural water system appropriations where applicable; 2.) calculated annual use based on permitted animals and rates of 20 gallons per day for beef cattle, 5 gallons per day for swine, 15 gallons per 100 turkeys, and 9 gallons per 100 chickens for large confinement operations permitted by the DENR; 3.) irrigation questionnaire reporting for irrigation permits when available; 4.) the most current water use reported for non-irrigation appropriations that are required to report, and 5.) assuming unreported water rights/permits limited to an annual volume will be used to the maximum and water rights/permits limited by diversion rate will be used 60% of continuous pumping at the maximum diversion rate for their annual use period.

In the years since Buhler (2012) estimated the average annual withdrawal, there have been 8 additional water rights/permits issued for the Inyan Kara aquifer. Using the same withdrawal parameters as Buhler (2012), these additional appropriations are estimated to increase the average annual withdrawal by 487 acre-feet per year. This amount includes the 274 acre-feet annually requested by deferred application 2686-2 for Powertech (USA) Inc. in the event that application 2686-2 is approved in the future and thus would hold a senior priority date to this application. This application is proposing to appropriate 31 acre-feet per year, which will increase the total appropriations since 2012 to 518 acre-feet per year. Assuming that the other water uses have not significantly changed since 2012, the current estimated average annual withdrawal is 11,492 acre-feet per year. Although this estimated average annual withdrawal

nearly equal the estimated average annual recharge amount, it should be noted that the recharge amount is from precipitation only and does not take into account the recharge from other sources such as streams as they flow over the outcrop areas of the Inyan Kara.

Comparison of annual recharge estimates and estimated annual well withdrawals for the entire state show that discharge is less than recharge, showing that there is a reasonable probability that unappropriated water is available for this proposed application.

Localized Hydrologic Budget

This method is a much more logical way of analyzing the hydrologic budget given the immense size of the aquifer. Not all precipitation recharge from the outcrop will be available to the proposed well site. The location of this well is less than five miles from the outcrop of the Inyan Kara aquifer, and by looking locally at the area of the outcrop, an estimate of the recharge available from precipitation for this application and the other existing water rights/permits upgradient and downgradient can be made. The potentiometric contours of the Inyan Kara aquifer were calculated for the area surrounding the Black Hills by Strobel and others (2000). As the Inyan Kara aquifer in this area is under artesian conditions, the cone of depression of a pumped well can extend for some distance. Taking into account the potential for an extensive cone of depression, and where it would capture groundwater flow, the portion of the Inyan Kara outcrop that contributes recharge for this local area has an area of approximately 1,200 acres. Buhler (2016) estimated that the annual precipitation recharge to the Inyan Kara aquifer near Sturgis, SD to be 1.26 inches per year. At 1.26 inches per year an outcrop area of approximately 1200 acres would generate 1,512 acre-feet of precipitation recharge annually.

Including the 31 acre-feet per year that would be appropriated if Water Permit Application No. 2778-2 is approved, the total well withdrawals directly up and down gradient of this proposed well site, would be 444 acre-feet annually. Therefore, average annual recharge can be expected to exceed average withdrawals for this area, and there is reasonable probability that unappropriated water is available for this appropriation.

OBSERVATION WELL DATA

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

The Water Rights Program monitors nine observation wells completed in the Inyan Kara aquifer (Water Rights, 2018b). The nearest observation well is PE-95E, located approximately 1.5 miles to the northwest of the well location. Observation wells PE-95B and MD-99A are respectively located 5.75 miles to south, and 9.25 miles to the northwest of the application's well. The difference in the elevation of the potentiometric surface between observation wells agrees with the potentiometric contours as drawn by Strobel and others (2000). Locally, PE-95E has shown

the effects of seasonal pumping, with recovery occurring once pumping has ceased. This decreasing trend may be attributed to domestic well usage in a housing development adjacent to the observation well. PE-95B shows a gradual increasing trend, and MD-99A shows a slight decreasing trend. However, the effects of climatic condition, rising water levels during wetter periods and slowly declining levels during drier periods, still dominate the changes in water levels.

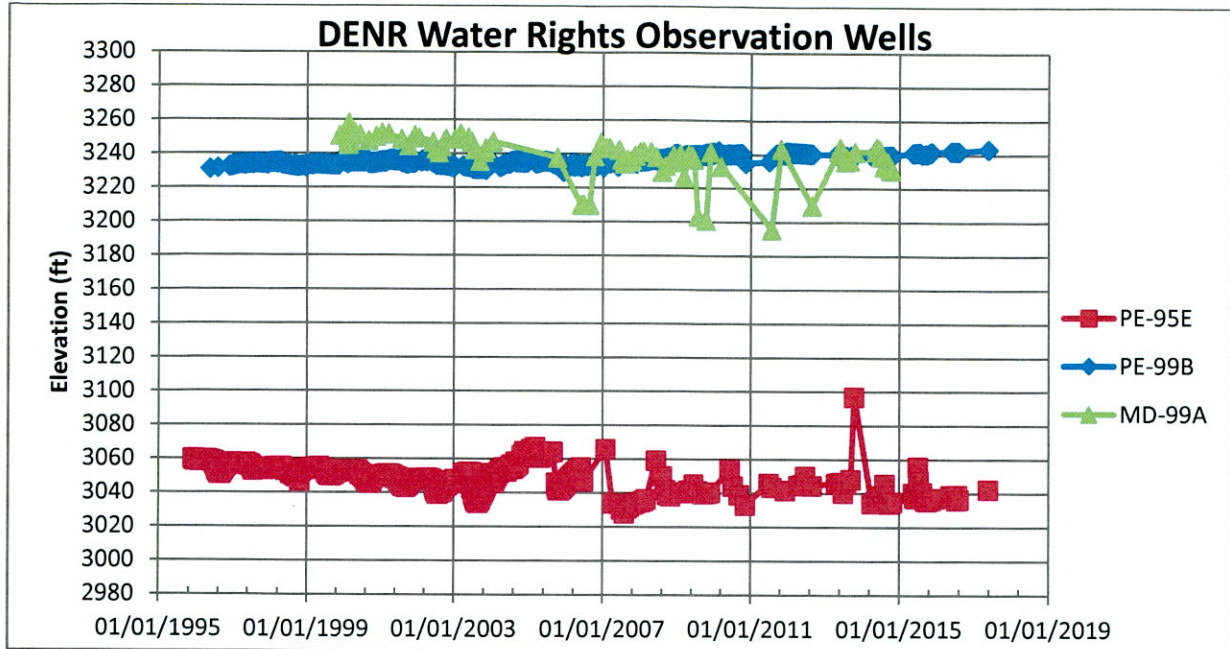


Figure 1: Hydrographs for Observation Wells PE-95E, PE-95B, and MD-99A (Water Rights, 2018b)

REVIEW OF EXISTING WATER PERMITS/RIGHTS

Existing water rights/permits appropriating ground water located within a three mile radius of this application (if approved) are shown in Table 1 and Figure 2 (Water Rights, 2018a).

PERMIT NO.	NAME	STATUS	AQUIFER	USE	RATE (cfs)
1790-2	BERRY PATCH CAMPGROUND	LC	INKR	COM	0.17
2051-2	CVRC LIMITED PARTNERSHIP	LC	INKR	COM	0.356
2225-2	FLYING J TRAVEL PLAZA	LC	INKR	COM	0.155
2268-2	PRAIRIE ACRES LLC	LC	INKR	SHD	0.22
514-2	SCHOLL	LC	INKR	COM	0.02
585-2	SCHOLL	LC	INKR	SHD	0.11
2334-2	GLM LAND CORPORATION	LC	INKR	RWS	0.067
2426-2	PIRATES COVE RAPID CITY	LC	INKR	IRR	0.067
2425-2	YOUNG	LC	INKR	SHD	0.111
1968-1	VENEKAMPS LLC	PE	INKR	SHD	0.11

Table 1. Water rights/permits within a three mile radius of the application showing the permitted diversion rate. (LC = license, INKR = Inyan Kara, COM = commercial, SHD = suburban housing development,

RWS = Rural Water System, IRR = irrigation)

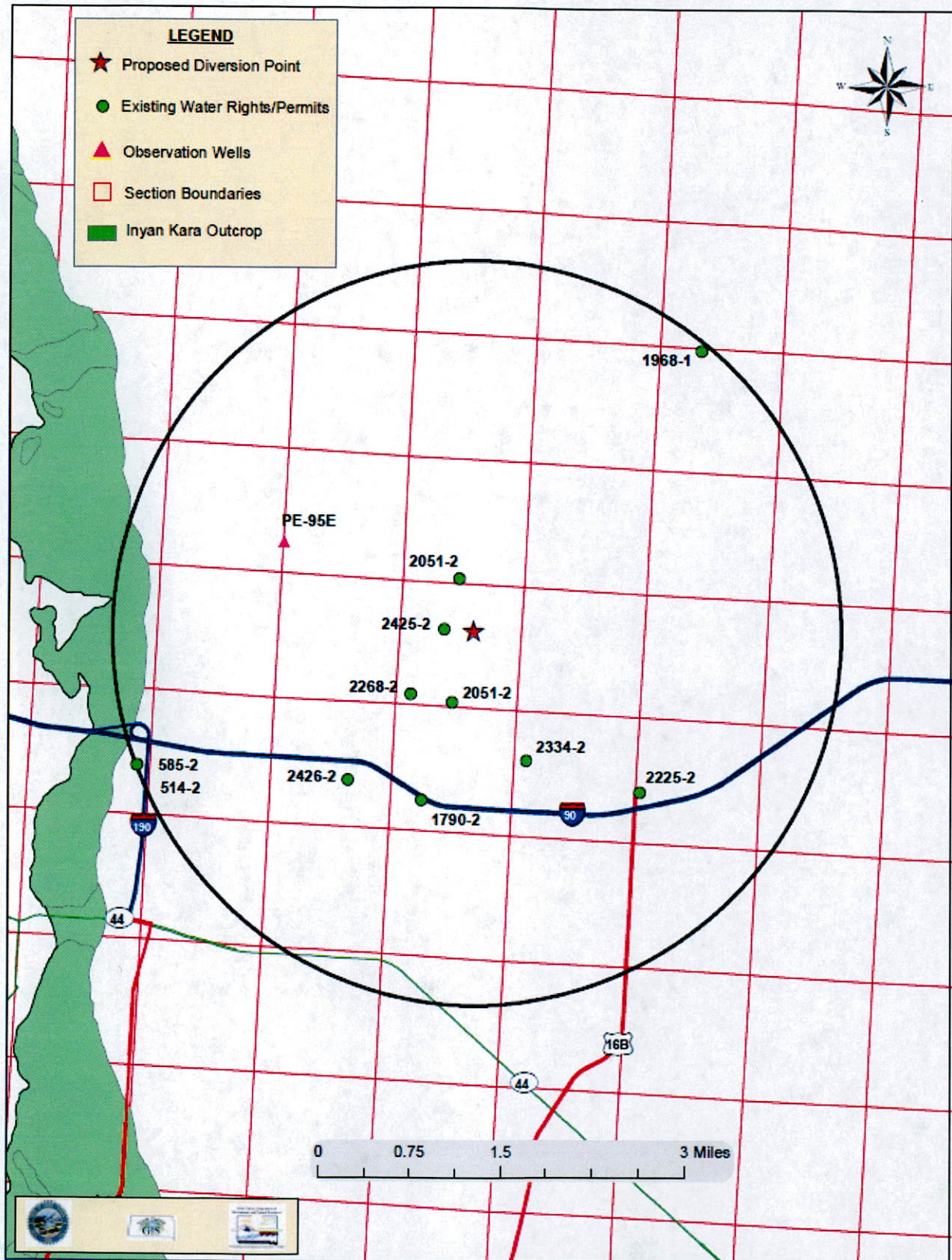


Figure 2. Approximate location of diversion points for water rights/permits appropriating water from Inyan Kara aquifer. Dark circle denotes a three mile radius of Application No. 2778-2 (if approved).

The nearest existing water right/permit completed in the Inyan Kara aquifer that could be affected from this application is Water Right 2425-2, located up gradient, and approximately ¼ mile to the west, with a priority date of 7/12/1999 (Water Rights, 2018a). There are domestic wells that use the Inyan Kara aquifer in this area, however their use is anticipated to be minor (Water Rights, 2018c). The low diversion rate proposed by this application is not likely to adversely affect adequate wells (domestic or appropriative).

The Inyan Kara aquifer is generally an artesian aquifer, and due to the physics of artesian head pressure, the drawdown from pumping may extend a considerable distance from the pumped well. SDCL 46-6-6.1 does not protect artesian head pressure as a means of delivery and the Water Management Board has consistently recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur. In order to balance interests between irrigation use and delivery of water by artesian pressure, the Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs”

Depending on the specific characteristics of the Inyan Kara aquifer at the well site proposed by this application, some existing well owners may need to lower their pumps to accommodate for deeper water levels.

CONCLUSIONS

1. Water Permit Application No. 2778-2 proposes to appropriate 31 acre-feet per year from the Inyan Kara aquifer at a maximum diversion rate of 0.17 cfs.
2. Approval of this application will not result in average annual withdrawals from the Inyan Kara aquifer to exceed the average annual recharge to the aquifer.
3. The Inyan Kara is a viable aquifer in this area and there is a reasonable probability that unappropriated water is available for this proposed appropriation.
4. Well interference is not expected to be significant and will not adversely impact existing users (domestic or appropriative).



Aaron Tieman

SD DENR-Water Rights Program

REFERENCES

- Allen, J.C., Iles, D.L., Petres, A.K., 1984. Analysis of Groundwater and Streamflow Data, Western Dakotas Region of South Dakota, Task 3 & 4: Groundwater Resources Inventory; Department of Water and Natural Resources, Division of Geological Survey, Vermillion, SD, U.S. Army Corps of Engineers Contract DAWC 45-82-C-0151.
- Buhler, K.A., 2012. Report to the Chief Engineer on Water Permit Application No. 2686-2, Powertech (USA) Inc., November 2, 2012: SD DENR Water Rights Program Water Permit Application File No. 2686-2.
- Buhler, K.A., 2016. Report to the Chief Engineer on Water Permit Application No. 1958-1, City of Sturgis, April 18, 2016: SD DENR Water Rights Program.
- Carter, J.M., Driscoll, D.G., 2001. Hydrologic Conditions and Budgets for the Black Hills of South Dakota, Through Water Year 1998. Water-Resources Investigations Report 01-4226. U.S. Geological Survey.
- Peter, K.D., 1985. Availability and Quality of Water from the Bedrock Aquifers in the Rapid City Area, South Dakota. U.S. Geological Survey, Water-Resources Investigations Report 85-4022, Rapid City, SD.
- Redden, J.A., 1994. Structural Contours and Phanerozoic Structures in the Rapid City, South Dakota, 1:100,000 Scale Quadrangle. Open-File Report 95-81, U.S. Geological Survey, Rapid City, SD.
- Strobel, M.L., Galloway, J.M., Hamade, G.R., and Jarrell, G.J. 2000. Potentiometric Surface of the Inyan Kara Aquifer in the Black Hills Area, South Dakota. Hydrologic Investigations Atlas HA-745-A Northern part of area. U.S. Geological Survey.
- Water Right, 2018a, Water Right/Permit Files, SD DENR, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.
- Water Right, 2018b, Observation Well Database, SD DENR, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.
- Water Right, 2018c, Well Completion Report Files, SD DENR, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, January 18, 2018 8:45 AM
To: 'shaileshp@dakotamill.com'
Subject: Water Permit Application No. 2778-2
Attachments: 2778-2.pdf

Shailesh,

Attached is the report, recommendation, public notice and instructions regarding Water Permit Application No. 2778-2 for industrial and commercial use. The paper copy is in the mail today.

Karen Schlaak

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



Affidavit of Publication

RECEIVED

FEB 07 2018

WATER RIGHTS
PROGRAM

Jan 25

L21072433
**NOTICE OF APPLICATION
NO. 2778-2**

to Appropriate Water

Notice is given that Western Construction, Inc., c/o Thomas E Lien Jr., PO Box 771, Rapid City SD 57709 has filed an application for a water permit to appropriate 31 acre-feet of water annually at a maximum pump rate of 0.17 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (1,750 feet deep) located in the SW 1/4 NE 1/4 Section 20-T2N-R8E. Water may be diverted directly or stored in a dug-out for industrial and commercial use located in the S 1/2 NE 1/4 Section 20 less lot 1 of Blue Marlin Est; all in T2N-R8E which is approximately one mile north of Rapid City SD. Water may be used to fill tanker trucks and hauled to work sites throughout the area.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2778-2 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 February 5, 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 \$65.69)

STATE OF SOUTH DAKOTA

County of Pennington

SS:

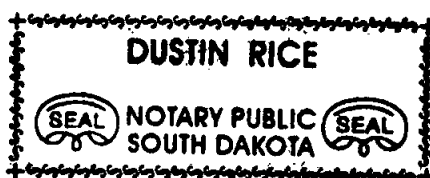
Sheri Sponder being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each day for one successive day, the first publication there of being on the 25th day of Jan 2018 that the fees charged for the publication there of are 65 dollars and 69 cents.

Sheri Sponder

Subscribed and sworn to before me this 5th
day of February, 2018.

Dustin Rice

Notary public



7/1/20
My commission expires

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, January 18, 2018 8:36 AM
To: RCY Legals (legals@rapidcityjournal.com)
Subject: 2778-2, Western Construction Inc.
Attachments: 2778-2public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on January 25, 2018.

Western Construction Inc, c/o Thomas E Lien Jr., PO Box 771, Rapid City SD 57709 (605 342-3834) 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



NOTICE OF APPLICATION NO. 2778-2 to Appropriate Water

Notice is given that Western Construction, Inc., c/o Thomas E Lien Jr., PO Box 771, Rapid City SD 57709 has filed an application for a water permit to appropriate 31 acre-feet of water annually at a maximum pump rate of 0.17 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (1,750 feet deep) located in the SW 1/4 NE 1/4 Section 20-T2N-R8E. Water may be diverted directly or stored in a dugout for industrial and commercial use located in the S 1/2 NE 1/4 Section 20 less lot 1 of Blue Marlin Est; all in T2N-R8E which is approximately one mile north of Rapid City SD. Water may be used to fill tanker trucks and hauled to work sites throughout the area.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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

January 18, 2018

Western Construction Inc
c/o Thomas E Lien Jr
PO Box 771
Rapid City SD 57709

Dear Mr. Lien:

Water Permit Application No. 2778-2 for industrial and commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Rapid City Journal (Ph # 605-394-8300). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper 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
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>

FEB 12 2018

Western Construction Inc.
c/o Thomas E Lien Jr
PO Box 771
Rapid City SD 57709

Dear Mr. Lien:

Enclosed is Water Permit No. 2778-2 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,

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