

WATER PERMIT NO. 2652-2

Name of Applicant: **Hills Materials Company**

Address: **c/o Lynn Kading, PO Box 2320, Rapid City SD 57709**

Phone: **605 394-3300**

Amount of Water Claimed: **0.222** Total Acres: **NA**

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

Water to be used for: **industrial use** County: **Fall River**

Type of Waste Disposal System: **NA**

Location: **1 mile north of Hot Springs**

PRIORITY Date Received: **5-4-10**

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

Corrected Application Received:

Period of Annual Use: **May 1 – August 31**

Remarks:

Diversion Point: **SW ¼ SE ¼ Sec 11-T7S-R5E**

Land to be Irrigated: **NA**

Depth of Well: **400 feet deep**

Well Driller:

Remarks:

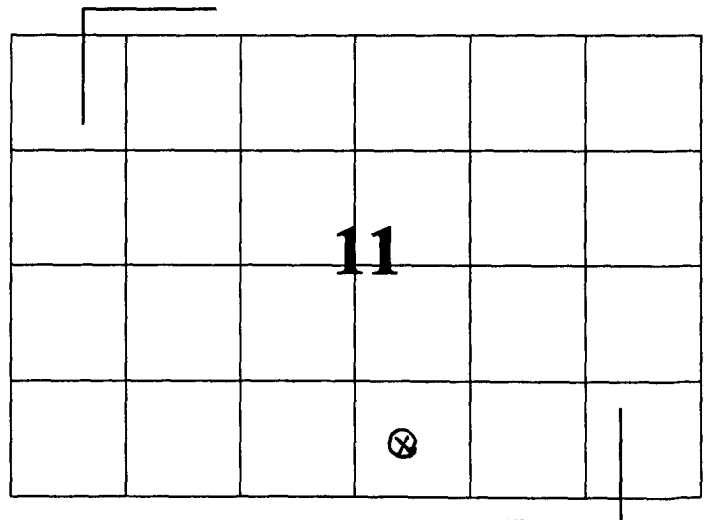
Type of Map: **topo**

Prepared by: **Roger Hall, PE**

Reviewed and the Number Assigned on: **5-11-10**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



SD EForm - 1585LD V3

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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2652-2</u> (office use only) Hydrologic Unit <u>10120109</u> Basin <u>Upper Cheyenne</u> Newspaper <u>Hot Springs Star Box 1000</u> <u>605-745-4170</u> <u>57747</u>
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RECEIVED
MAY 04 2010
WATER RIGHTS
PROGRAM

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

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:
(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 of Applicant Hills Materials Company Phone 605-394-3300
 (check one) ☒ Owner ☐ Tenant/lessee
 Mailing Address PO Box 2320 Rapid City SD 57709
 (Address) (City) (State) (Zip Code)
2. Amount of water claimed 0.222 *CFS or 100 **GPM N/A ***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 Minnelusa Formation
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Fall River
1 well in SW 1/4 SE 1/4 Sec 11-T7S-R5E
5. County or counties where water will be used Fall River
6. Annual period during which water is to be used Jan 1 - Dec 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)
Well described on form 2A to be used in conjunction with Hot Springs Quarry wash plant.

STATE OF SOUTH DAKOTA)
 County of Pennington) SS

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

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

Applicant's signature

Subscribed and sworn to before me this 23rd day of April 20 10

Notary Public signature

Sharon K. Coston
 Notary Public signature
 My commission expires: 1-30-2015

**SOUTH DAKOTA
WATER PERMIT NO. 2652-2**

Date of first receipt of application May 4, 2010.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2652-2 to Hills Materials Company, c/o Lynn Kading, PO Box 2320, 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. 2652-2 appropriates 0.222 cubic feet of water per second from one well to be completed into the Minnelusa Aquifer (approximately 400 feet deep) located in SW 1/4 SE 1/4 Section 11-T7S-R5E.
2. The water appropriated shall be used for the purpose of industrial use at the Hot Springs Quarry wash plant 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. 2652-2 is September 10, 2010.
5. The date from which applicant may claim right is May 4, 2010.
6. One-fifth of the construction is to be completed on or before March 10, 2013.
7. All construction is to be completed on or before September 10, 2015.
8. Water is to be put to beneficial use on or before September 10, 2019.
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. 2652-2 shall be constructed by a licensed well driller and construction 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.

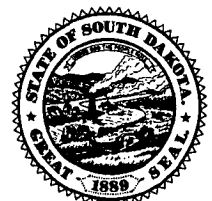
WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 28 2010

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 8-3/4 inches Depth 400 feet
- b) Casing Type Steel Diameter 7 inch O.D. Thickness 0.317 inch
- c) Screen Type none Diameter N/A Thickness N/A
- d) Gravel Pack N/A Length of Gravel Pack N/A
- e) Depth to Top of Water Bearing Material 300'
- f) Depth to Water (ground surface to water level) 200'
- g) Distance to nearest existing domestic well:
- On applicant's property 1080 feet (approx) On 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

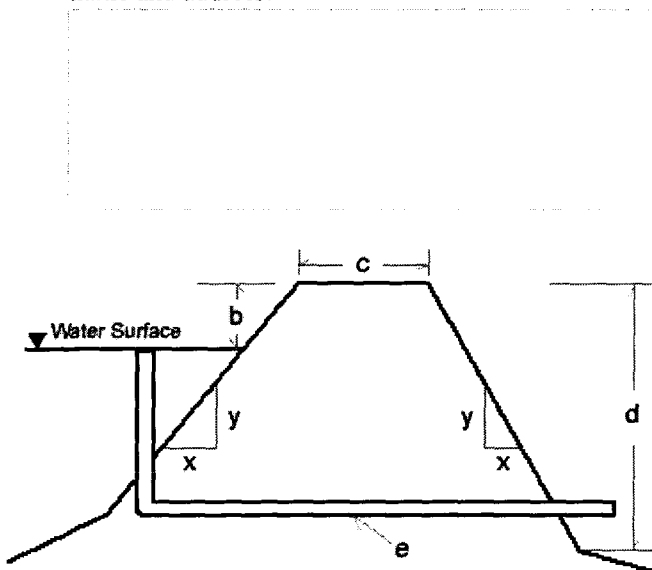
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

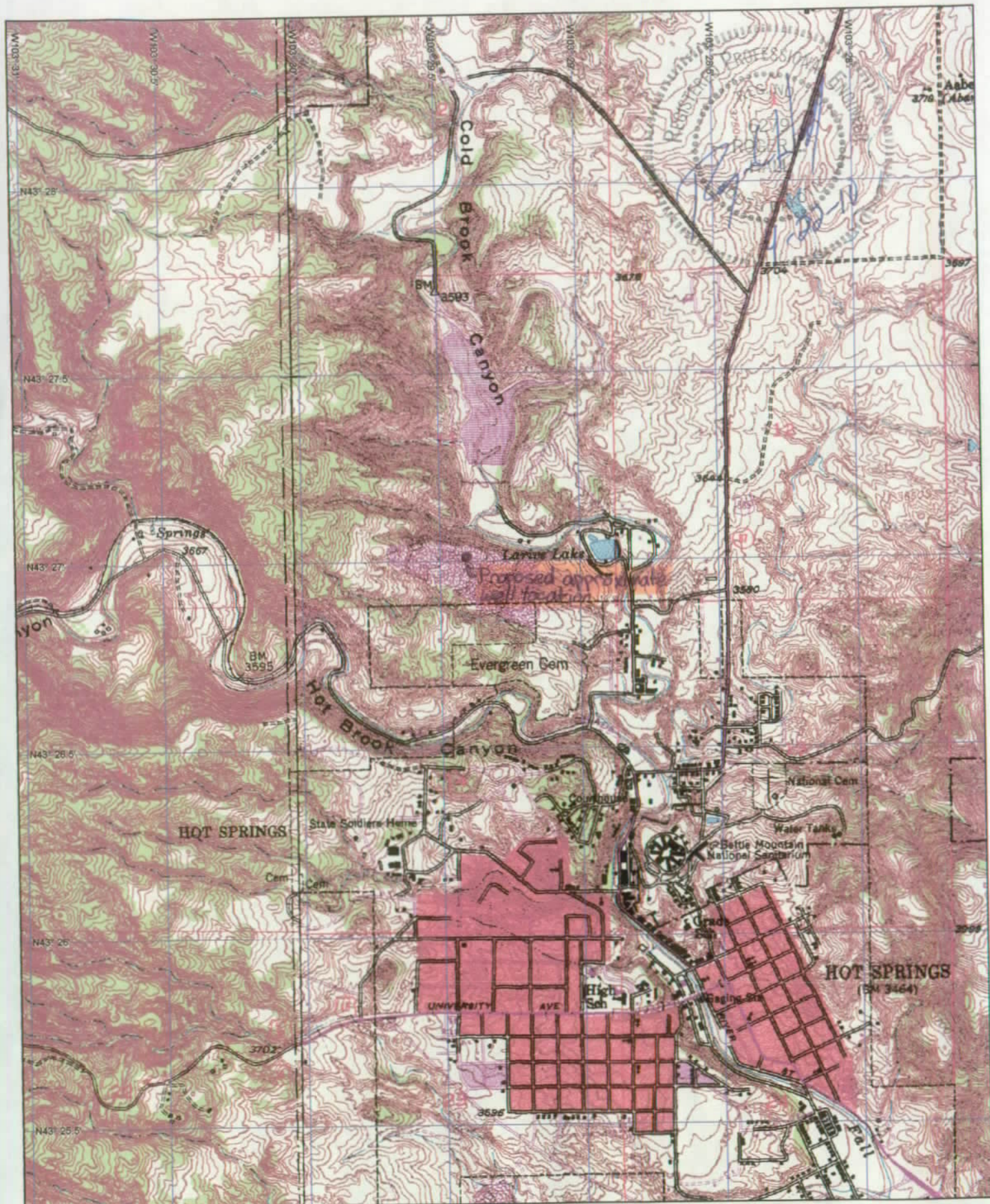
4. Water Storage Dams

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



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/4, 20 10

RECEIVED OF Hills Material PO Box 2320 Rapid City SD 57709

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

Fee for Application for Permit No. <u>2652-2</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>2652-2</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. 04543

By

[Signature]
Chief Engineer

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Water Permit Application No. 2652-2, Hills Material

ADDRESS: PO Box 2320, Rapid City SD COUNTY: Fall River

DATE: August 18, 2010 TELEPHONE: 394-3320

RE: annual period of use

Clint with Hills Material called requested the application be amended for an annual period of use of January 1 – December 31. The application is currently being public noticed. I reviewed the report which did not site the annual period of use in reaching a conclusion that water is available and existing rights are not expected to be unlawfully impaired. Therefore, the change was made to the application.

NAME: Eric Hundert



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2652-2, Hills Materials Company**

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. 2652-2, Hills Materials Company, c/o Lynn Kading, PO Box 2320, Rapid City SD 57709.

The Chief Engineer is recommending APPROVAL of Application No. 2652-2 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. 2652-2 shall be constructed by a licensed well driller and construction 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.

See report on application for additional information.

Garland Erbele, Chief Engineer
July 13, 2010

WATER PERMIT APPLICATION NO.2652-2
HILLS MATERIALS COMPANY
JUNE 29, 2010

Water Permit Application No. 2652-2 proposes to appropriate 0.222 cubic feet of water per second from one well to be completed into the Minnelusa aquifer (approximately 400 feet deep) located in the SW¼ SE¼ Section 11, T7S-R5E. The water is to be used for industrial use at the Hot Springs Quarry wash plant.

AQUIFER: Minnelusa (MNSL)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Minnelusa Formation consists of alternating beds of sandstone, anhydrite, limestone and dolomite with lesser amounts of shale and chert (Wolcott, 1967), approximately 700 feet thick in this area (Carter and Redden, 1999a; Carter and Redden, 1999b). The outcrop (recharge area) of the Minnelusa Formation is located within one-half mile of this well site (Wolcott, 1967), and the top of the formation is expected to be approximately 135 feet below grade at this well site (Carter and Redden, 1999a). The porous portions of the Minnelusa Formation form the Minnelusa aquifer. Well sorted sand lenses have porosity's approaching 25%, but generally the sands have porosity's of 10%. The average porosity of the Minnelusa is estimated to be 10% and the effective porosity is assumed to be 5% (Rahn, 1979). The Minnelusa Formation underlies virtually all of western South Dakota and the Minnelusa aquifer contains over 755 million acre-feet of recoverable water in storage (Allen and others, 1985). The Minnelusa aquifer underlies approximately 1,743 acres of Fall River County and contains an estimated 52,987,200 acre-feet of recoverable water in storage in the county (Allen and others, 1985). Ground water movement in the aquifer in this area is probably from west to east (Strobel, and others, 2000). The water quality of the aquifer is generally good near the outcrop but deteriorates considerably with distance from the recharge area. Estimates from regional studies of the aquifer indicate the aquifer transmissivity may range from 0.86 to 12,000 ft²/d, and the storage coefficient ranges from 0.003 to 5.0 x10⁻⁹ (Driscoll, and others, 2002). The static water level for a well at this proposed site is expected to be around 170 feet below ground surface (Strobel and others, 2000).

Although the aquifer is unconfined at the well site proposed by this application, the Minnelusa is generally confined by the overlying Opeche Shale and the lower portion of the formation serves as an aquitard isolating the Minnelusa aquifer from the underlying Madison aquifer.

The Minnelusa was not considered a major aquifer in Fall River County by Keene, (1973), due to the areal variation in permeability and a "loss of permeability downdip from the Minnelusa outcrop. However, he suggests that the Minnelusa represents a potential aquifer near the outcrop. Infiltration and percolation of ground water has removed by solution several hundred feet of anhydrite and other minerals from the Minnelusa near the outcrop (Wolcott, 1967). In some cases, conduits (i.e. Brecchia pipes) were formed by the solution of anhydrite with percolating ground water in the Minnelusa Formation.

SDCL 46-2A-9

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

WATER AVAILABILITY:

Water Balance:

The availability of unappropriated water from an aquifer can be evaluated by considering SDCL 46-6-3.1. This statute requires that an application to appropriate groundwater can not 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 average estimated annual recharge.

Recharge to the Minnelusa aquifer is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge in the Black Hills area from 1931-1998 was estimated to be approximately 112,000 acre-feet per year (Carter and others, 2001a).

There are a total of 197 appropriations from the Minnelusa aquifer in South Dakota, including one future use permit, which reserves 1,364 ac-ft/yr (Water Rights, 2010b). Future Use Permit No. 902-2 was approved in 1967, for the South Dakota Cement Plant. In 2001 the cement plant was sold from the South Dakota State Cement Plant Commission to GCC Dacotah, Inc. While the other water rights that were held by the State Cement Plant were transferred from the Commission to GCC Dacotah, Inc., Future Use Permit No. 902-2 has not been transferred. It is not clear if GCC Dacotah, Inc. fits the criteria established by SDCL-46-5-38 for an entity that is entitled to a future use reservation.

Maximum well withdrawals from the Minnelusa aquifer, assuming (1) that permits/rights with an annual withdrawal limitation (ac-ft/yr.) will use the maximum allowable; and (2) permits/rights that are limited by a diversion rate only, will use 60% of the maximum allowable (considered reasonable for water distribution systems); would be approximately 25,000 acre-feet per year. Withdrawals from wells (domestic and appropriative) completed into the Minnelusa aquifer in the Black Hills area were estimated to be 8,140 acre-feet annually from 1987-1996 (Carter and others, 2001b).

Comparison of annual recharge estimates and estimated annual well withdrawals show that well withdrawals from the Minnelusa are only a fraction of estimated average annual recharge. Therefore, based on a simple water budget, it is clear that unappropriated water is available for this appropriation. A water budget is not intended to suggest that all of the water that is in storage in the Minnelusa aquifer or that all of the recharge is available for this appropriation, merely to demonstrate that in general the aquifer is an immense resource that is relatively untapped.

Localized Hydrologic Budget:

Carter and others (2001b) developed a hydrologic budget for the Madison and Minnelusa aquifers combined, for a subarea that includes the well site proposed by this application. The hydrologic budget for this subarea balanced from 1987-1996, by estimating that water enters the subarea through streamflow recharge, precipitation recharge and groundwater inflow from the north and west. Water was assumed to exit this subarea through artesian spring discharge, well withdrawals and groundwater outflow to subareas to the east and northeast (Carter and others, 2001b). The estimates for this area are shown in table 1.

Stream-flow recharge	Precipitation recharge	Minnelusa groundwater inflow	Madison groundwater inflow	Minnelusa groundwater outflow	Madison groundwater outflow	Artesian spring-flow	Well with-drawals
4.4 cfs	6.1 cfs	24.5 cfs	23.2 cfs	8.0 cfs	4.0 cfs	44.3 cfs	1.8 cfs

Table 1. Hydrologic budget for the subarea that includes the well site proposed by Application No. 2652-2 for Water Years 1987-1996. Modified from (Carter and others, 2001b).

Obviously, if a new hydrologic budget is to balance for this subarea (i.e. a new condition of dynamic equilibrium), with an increase of well withdrawals, either groundwater outflow must decrease, groundwater inflow from other subareas must increase, or artesian springflow must decrease. It can be assumed that with a very subtle change in the hydraulic gradient at either an inflow zone or an outflow zone, a new dynamic equilibrium would be established in this area with virtually immeasurable impacts to the amount of water in storage or artesian springflow.

Observation Well Data:

The best information available to evaluate development as it relates to recharge, is historical records and data from observation wells. The difference between withdrawal from an aquifer and recharge is reflected by the water level of the aquifer. If the water level of an aquifer continues to decline, it may suggest that withdrawals exceed recharge. The Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer in the Black Hills area (Water Rights, 2010a). Water Rights' Observation Well FR-95B is located approximately one and one-quarter mile southwest of the well site proposed by this application. The hydrograph for the well (figure 1) shows that over the period of record, withdrawals from the area have not exceeded recharge.

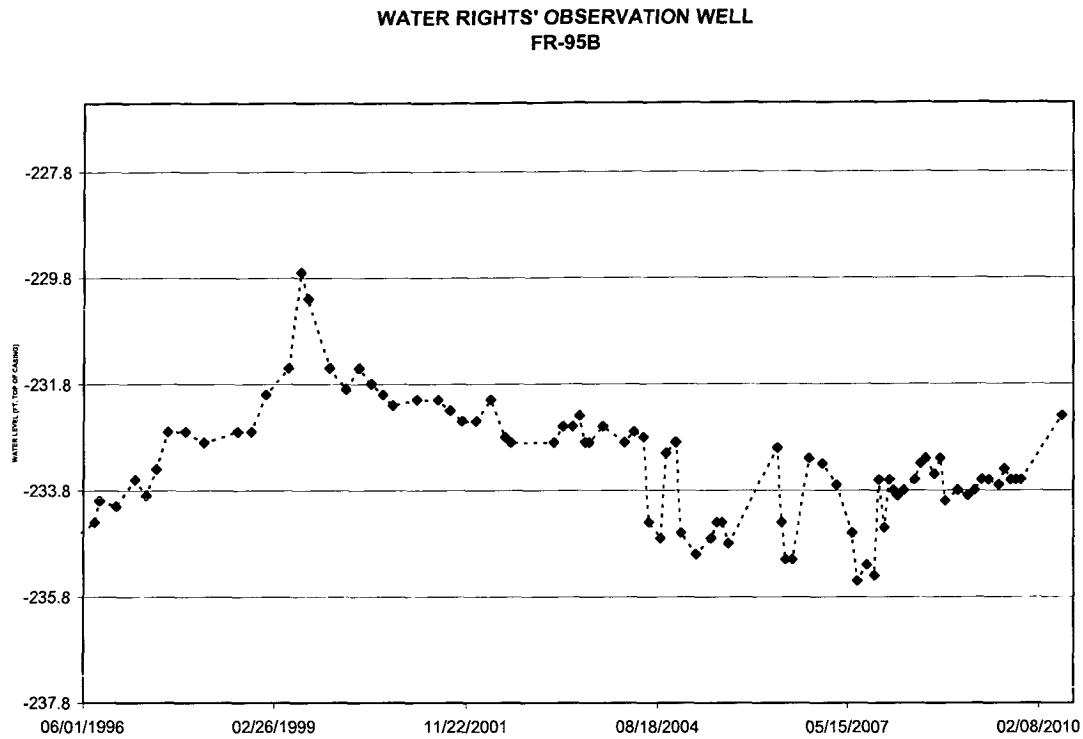


Figure 1. Hydrograph of an observation well completed into the Minnelusa aquifer approximately one and one-quarter miles southwest of the well site proposed by this application.

AFFECTS ON EXISTING RIGHTS:

There are a number of domestic wells completed into the Minnelusa aquifer (Water Rights, 2010c) and 11 Water Rights/Permits appropriating groundwater within approximately four miles of the well site proposed by this application. The appropriative rights are shown in Table 2.

PERMIT NO	NAME	STATUS	AQUIFER	USE	CFS	ACRES
498-2	STATE VETERANS HOME	LC	MNLS	IRR	1.10	21.00
511-2	CITY OF HOT SPRINGS	LC	ALQ	MUN	3.77	
1704-2	COUNTRY CLUB ESTATES CORP	LC	MNLS	SHD	0.20	
1721-2	KENYON A HARTIGAN	LC	MNLS	IRR	0.02	1.70
1878-2	CITY OF HOT SPRINGS	LC	ALQ	MUN	4.83	
2113-2	JAMES A/DORIS J WILHELM	LC	MNLS	IND	0.03	
2151-2	CITY OF HOT SPRINGS	LC	ALQ	GEO	0.01	
2190-2	CHURCH OF JESUS CHRIST OF LDS	LC	MNKT	IRR	0.09	1.50
2258A-2	JOHN HAMES	LC	ALQ	COM	0.03	
2392-2	WENDELL RAY SCHWARZ TRUST	PE	MDSN	COM	0.25	
2422-2	HOT SPRINGS SCHOOL DIST	LC	MNKT	IRR	0.09	6.22
2431-2	CITY OF HOT SPRINGS	PE	ALQ	MUN	0.00	
2491-2	MERCHEN	LC	MNLS	SHD	0.04	
2510-2	DAVID ENYEART	PE	UKPP	IRR	0.05	3.00
LC= Water Right, PE=Water Permit; ALQ= Alluvium, MNKT= Minnekahta, MNLS= Minnelusa, MDSN= Madison, UKPP= Unkpapa COMM= Commercial, GEO= Geothermal, IRR= Irrigation, MUN= Municipal, SHD= Suburban Housing Development						
* in addition, Future Use Permit No. 512-2, City of Hot Springs, reserves 1,846 ac-ft/yr from the Fall River alluvium						

Table 2. Groundwater appropriations within approximately 4 miles of the well site proposed by Water Permit Application No. 2652-2.

Water rights/permits completed into aquifers other than the Minnelusa are not expected to be affected by withdrawals from the Minnelusa. The Water Rights/Permits supplied by the Minnelusa aquifer and their distance from the well proposed by this application are shown in table 3.

PERMIT NO	NAME	DISTANCE FROM 2652-2
498-2	STATE VETERANS HOME	1 MILE
1704-2	COUNTRY CLUB ESTATES CORP	2.5 MILES
1721-2	KENYON A HARTIGAN	0.9 MILES
2113-2	JAMES A/DORIS J WILHELM	3 MILES
2491-2	MERCHEN	3 MILES

Table 3. Water Rights appropriating water from the Minnelusa aquifer within approximately 4 miles of the well site proposed by Water Permit Application No. 2652-2.

Since the Minnelusa aquifer is expected to be under unconfined conditions at this well site, the drawdown cone resulting from pumping this well is not expected to be significant very far from the well. The distances between this proposed well and existing water rights is sufficient for the diversion rate proposed to minimize well interference. Existing rights are not expected to be unlawfully impaired if this application is approved.

In addition, to the groundwater appropriations listed above, Table 4 shows water rights/permits appropriating water from springs in the Hot Springs area.

PERMIT NO	NAME
2001-2	EVANS PLUNGE
2392-2	WENDELL RAY SCHWARZ TRUST
2420-2	VETERANS AFFAIRS
2421-2	VETERANS AFFAIRS

Table 4. Water Right/Permits appropriating water from springs in the Hot Springs area.

When considering Future Use Permit No. 2560-2 for Fall River Water User District, and subsequent applications for appropriations from the Madison aquifer in the Hot Springs-Beaver Creek Springs area, the Water Management Board accepted that SD Water Law does not protect artesian head pressure as a means of diversion and determined that well interference resulting in decreased discharge from these “artesian” springs could probably not be considered an adverse impact.

PUBLIC INTEREST:

There are a number of artesian springs in the Hot Springs area (see figure 2). These springs are classified as Type 2 springs by Rahn and Gries (1973), meaning “The springs do not dry up and serve as points of permanent discharge from the carbonate aquifer” (Rahn and Gries, 1973). A decline of the potentiometric surface in the vicinity of the springs could decrease spring discharge.

In addition to potential impacts to water rights/permits appropriating water directly from the springs, since the springs provide a fairly steady base flow in Hot Brook, Cold Brook Reservoir and Fall River, impacts to surface water and the associated alluvial aquifer users must also be considered. While accepting that SD Water Law does not protect artesian head pressure as a means of diversion, the Water Management Board did recognize that there may be “public interest” issues with decreased spring discharge or the reduction of base flows in area streams that may result from well interference. Approval of Future Use Permit No. 2560-2 included the following qualification:

“At such time as definite plans are made to construct works and put the water reserved by this permit to beneficial use, specific application for all or any part of the reserved water must be submitted and approved prior to construction of facilities pursuant to SDCL 46-5-38.1 with particular attention given to the flows of Beaver Spring, Cascade Springs and Hot Springs.” (Water Rights, 2010b)

When considering the deferral of Water Permit Application No. 2585-2, Southern Black Hills Water System, the Water Management Board adopted a conclusion of law (No. 11) which states in part “The only protection South Dakota law provides when considering an application for an underground water permit for flow from an artesian spring is under the public interest criteria.” (Water Rights, 2010b).

In considering Water Permit Application No. 2633-2, the Water Management Board concluded:

“...that significant adverse effects on discharges from Beaver Creek Springs arising from Applicant’s proposed well operations, though not probable, are possible, and may result in severe consequences to Beaver Creek water permit holders. Therefore the Board concludes, that granting the Application is in the public interest if it includes a qualification, in addition to the qualifications recommended by the State Engineer, that the Applicant control withdrawals from the well so there is not a significant adverse effect on the water flow from Beaver Creek Springs or a significant adverse effect on the water quality and character in Beaver Creek Springs. How the Applicant monitors its activities to comply with this condition is left to the sound judgment of Applicant and its experts.” (Water Rights, 2010b)

The well site proposed by Water Permit Application No. 2652-2 is located within 1.2 miles of nine springs (see figure 2). There is a large spatial variability in major-ion chemistry in the springs in the Hot Springs area (Naus and others, 2001), suggesting different contributions of the Madison and Minnelusa aquifers to the various springs. The springs in the Hot Springs area appear to be primarily Madison-fed springs, but some of the springs also have a Minnelusa aquifer influence (Whalen, 1994). A fairly large change in the hydraulic gradient in the vicinity of the springs would be necessary to significantly affect the groundwater flow rates and consequently the spring’s discharge. Given the distance involved and the relatively low diversion rate proposed by this application, (100 gpm maximum), it is unlikely that drawdown from this well would have a measurable impact on spring discharge.

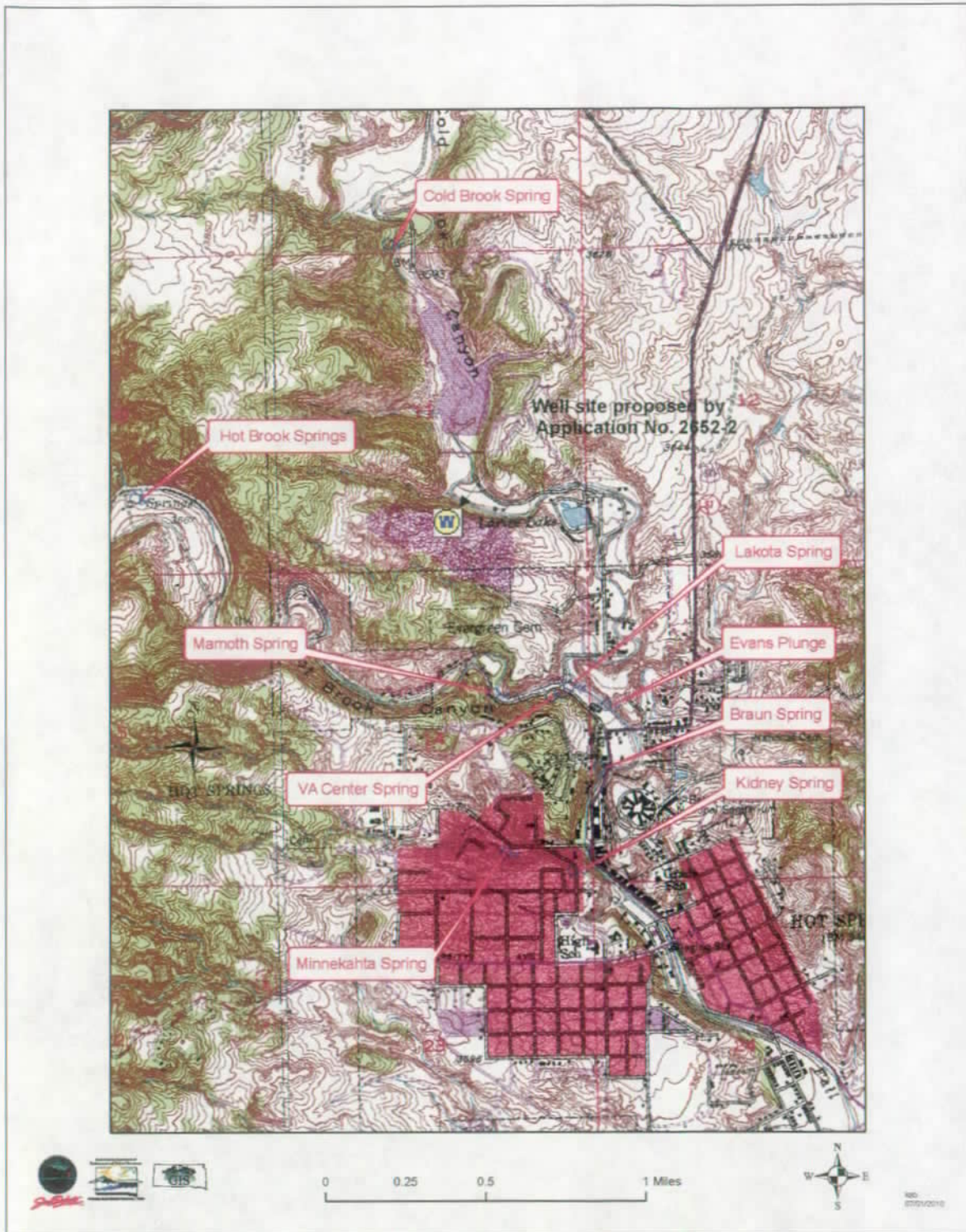


Figure 3. Springs in the Hot Springs area and location of the well site proposed by Application No. 2652-2.

CONCLUSIONS:

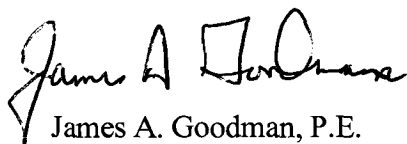
1. The Minnellsua is a viable aquifer in this area
2. The Minnelusa aquifer is expected to be under unconfined conditions at this well site.
3. There is a reasonable probability that unappropriated water is available for this appropriation.
4. Existing water rights are not expected to be unlawfully impaired if this application is approved.
5. South Dakota Water Law does not protect artesian pressure as a means of diversion.
6. Any well interference resulting in decreased discharge of "artesian springs" may be considered a "public interest" issue.
7. It is unlikely that this appropriation will affect spring discharge in the Hot Springs area.



Ken Buhler

Natural Resources Engineering Specialist

approved by



James A. Goodman, P.E.

Natural Resources Engineering Director

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1984, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Tasks 3A.B.C. and 4A.B.: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources,
- Carter, J.M., Driscoll, D.G., and Hamade, G.R., 2001a, Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years 1931-98: U.S. Geological Survey Water-Resources Investigations Report 00-4278, 66 p
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001b, Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-1996: U.S. Geological Survey, Rapid City, SD Water-Resources Investigations Report 01-4119, 53 p
- Carter, J.M., and Redden, J.A., 1999a, Altitude of the Top of the Madison Limestone in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-D, 2 sheets, scale 1:100,000

- Carter, J.M., and Redden, J.A., 1999b, Altitude of the Top of the Minnelusa Formation in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-C, 2 sheets, scale 1:100,000
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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

August 17, 2010

Hot Springs Star
PO Box 1000
Hot Springs SD 57747

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2652-2 to Appropriate Water to be published twice. Please publish the first notice on August 24, 2010 with the second publication 7 days later. The text of the notice has been e-mailed to your paper.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Hills Materials Co., c/o Lynn Kading, PO Box 2320, Rapid City SD 57709 (Ph # 605-394-3300).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund /ks

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

No. 2652-2

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of July 28, 2010 enclosing Notice to Appropriate Water by Application No. 2652-2 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

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

August 17, 2010

Hills Material Co
Lynn Kading
PO Box 2320
Rapid City SD 57709

Dear Mr. Kading:

Water Permit Application No. 2652-2 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 Publisher of the Hot Springs Star printed at Hot Springs SD (Ph # 605-745-4170). 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, the publisher has been instructed to publish your notice once each week for two consecutive weeks. 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/KS

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
eric.gronlund@state.sd.us

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.

Water Rights Program - File Documentation

NAME: Hot Springs Star

ADDRESS: Hot Springs SD

DATE: 8-17-10 **COUNTY:** Fall River **TELEPHONE:** 745-4170

RE: publication notice – Hills Materials Company

COMMENTS:

I called the Hot Springs Star and talked with Lori regarding the publication notice for this application. Lori indicated, the paper never received the notice.

The revised notice was emailed to the paper and followed with the mailed copies.



Karen Schlaak
Environmental Scientist

Instruction to Newspaper - Publish first Notice on August 24, 2010 with the second publication 7 days later. The applicant is responsible for payment. The text of the notice has been e-mailed to your paper.

NOTICE OF APPLICATION NO. 2652-2 to Appropriate Water

Notice is given that Hills Materials Company, c/o Lynn Kading, PO Box 2320, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.222 cubic feet of water per second from one well to be completed into the Minnelusa Aquifer (approximately 400 feet deep) located in SW 1/4 SE 1/4 Section 11-T7S-R5E for industrial use at the Hot Springs Quarry wash plant.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2652-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 10, 2010.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published twice at the total approximate cost of_____.

RECEIVED

SEP 16 2010

WATER RIGHTS
PROGRAM
AFFIDAVIT OF PUBLICATION

State of South Dakota)
) ss.
County of Fall River)

Brett Nachtigall of Hot Springs, Fall River County, South Dakota, being duly sworn, upon oath says that he is the publisher of the Hot Springs Star, as a legal newspaper, as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive, and is published at Hot Springs, county and state aforesaid; that the advertisement headed –

#314 Notice

a true printed copy thereof is hereunto annexed, was published in the said Hot Springs Star, in the regular and entire issue of said paper,

for two

successive issues, beginning with the issue dated _____

Aug. 24, 2010

and ending with the issue dated _____

Aug. 31, 2010

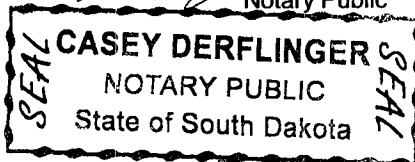
That the full amount of the fee charged for the publication of said notice is

\$ 46.25, and that no agreement or understanding, for the division thereof, has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever, that the whole amount insures to the benefit of the publishers of said newspaper.

Brett Nachtigall
Subscribed and sworn to before me

this 14 day of Sept
2010

Casey Derflinger
Notary Public



314

NOTICE OF APPLICATION
NO. 2652-2 to Appropriate
Water

Notice is given that Hills Materials Company, c/o Lynn Kading, PO Box 2320, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.222 cubic feet of water per second from one well to be completed into the Minnelusa Aquifer (approximately 400 feet deep) located in SW 1/4 SE 1/4 Section 11-T7S-R5E for industrial use at the Hot Springs Quarry wash plant.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2652-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 10, 2010.

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

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

Published twice at the total approximate cost of \$46.25.

Aug. 24, 31



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

SEP 28 2010

Hills Materials Company
Lynn Kading
PO Box 2320
Rapid City SD 57709

Dear Mr. Kading:

Enclosed is Water Permit No. 2652-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

Mail to: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

Water Right/Permit No. 2652-2Date: 1-1-15

I/We request that Water Right/Permit No. 2652-2 formerly owned by:
Hills Materials Company be transferred to:

New Owner Name: Simon ContractorsAddress: 1103 Old Town Lane Suite 201ACity, State, Zip Cheyenne WY 82009 Telephone No. 307-635-9005

Title to the following described land(s)/property has been transferred as described above:

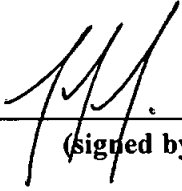
SW1/4SE1/4 Sec 11, Twn 7S, Rng 5E

☒ I understand that the validity of Water Right/Permit No. 2652-2 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below.)

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.

I, Simon Contractors, the new owner, certify that the above information is true and correct.


(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

RECEIVED

JUN 22 2015

WATER RIGHTS
PROGRAM

(email)
April 23, 2015

Mr. Wilkes
Hills Materials

RE: 2652A-2, 2652-2, 2071-2, 1916-1, 1547-1, 1187-1A

Thank you for visiting with me about the ownership changes for all water permits and water rights held by Hills Materials.

As I indicated on the phone – a fee is required for filing all ownership changes. The fee is \$50 for each one filed for a total of \$300. The check or money order for the total amount can be made payable to the Water Rights Program.

Also, the forms indicate the water rights and permits should be transferred to Simon Contractors, 1103 Old Town Lane, Suite 201A, Cheyenne WY. We can certainly transfer everything and use that address but it would be helpful if we had a contact person to include in the files for future reference. I am unable to read the signature of the person who filled out the forms.

Please include that information along with the \$300 fee by return mail. The address for mailing is:
DENR, Water Rights Program
523 E Capitol Ave
Pierre SD 57501 3182

Thank you in advance for your help.

Genny McMath
Water Rights Program
605 773-5455

OK mmw
\$ 300 -
101505.72750.80

Send with check!

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 6/22, 20 15

RECEIVED OF Simon Contractors PO Box 2720 Rapid City SD 57709

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	50	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. _____		
Fee for Filing Transfer Form <u>2652-2</u>		
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	50 00

No. 07420

By

Jeanne Hoodman
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

June 23, 2015

Simon Contractors
1103 Old Town Lane Ste 201A
Cheyenne WY 82009

RE: Water Permit or Right Nos. 2652A-2, 2652-2, 2071-2, 1916-1, 1547-1, 1187-1A

Dear Sirs:

I am writing to acknowledge receipt of the transfer of ownership forms and filing fees for changing ownership on Water Permit or Right Nos. 2652A-2, 2652-2, 2071-2, 1916-1, 1547-1, 1187-1A.

The ownership changes have been completed. The above listed water permits and water rights, formerly listed in the name of "**Hills Materials Company**" are now held by "**Simon Contractors**".

The fees for filing of the ownership changes came from your Rapid City office and will be forwarded by copy of this letter to that office. If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

c: Michael R Wilkes, Hills Materials Co., Division of Simon Contractors, PO Box 2720,
Rapid City SD 57709 w/Receipts



2652-2
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

2652A-2

MAY 03 2016

Simon Contractors
1103 Old Town Lane #201A
Cheyenne WY 82009

Dear Sir:

Enclosed is Water License No. 2652A-2. This is the final water right document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the investigation.

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.

Sincerely,

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

c: Hills Materials, John Krispin, PO Box 2720, Rapid SD 57709

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 2652A-2

(1) Hills Materials Company, Rapid City SD made Application No. 2652A-2, February 1, 2011 for no addition appropriation of water from one additional well – Minnelusa Aquifer, Fall River County, South Dakota for industrial use purposes. Permit No. 2652A-2, with a priority date of May 4, 2010 was approved May 9, 2011 and issued to the applicant for diversion of water with construction of the described water supply system and the application to beneficial use of water completed.

Water Permit No. 2652-2, with a priority date of May 4, 2010 authorizes 0.222 cubic feet of water per second from one well.

An investigation conducted for licensing purposes found the wells under Water Permit Nos. 2652-2 and 2652A-2 were not in the locations authorized by the permits. Pursuant to SDCL 46-5-13.1, the Chief Engineer makes a finding that the change in location of diversion points does not increase the potential for interference with existing water rights.

The applicable portions of No. 2652-2 are incorporated into No. 2652A-2.

On April 9, 2015, Water Permit Nos. 2652-2 and 2652A-2 were transferred to Simon Contractors, 1103 Old Town Lane, Suite 201A, Cheyenne WY 82009.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 2652A-2 is issued a license, bearing a priority date of May 4, 2010 to appropriate 0.22 cubic feet of water per second from two wells – Minnelusa Aquifer for industrial use purposes at the Hot Springs Quarry.

The diversion points are located: Well #1 – 1,235 feet east and 176 feet north of the SW corner of Section 11 (SW 1/4 SW 1/4) and Well #2 – 1,796 feet east and 815 feet north of the SW corner of Section 11 (SE 1/4 SW 1/4); all in T7S-R5E.

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 2652A-2 including the following qualifications:

- The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The wells authorized by Permit No. 2652-2 shall be constructed by a licensed well driller and construction 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. *The wells were drilled by Dakota Bice Drilling in 2010. Copies of the logs are on file with the Water Rights Program.*
- Permit holder shall report to Chief Engineer annually the amount of water withdrawn from the Minnelusa Aquifer. *Yearly water use records are on file with the Water Rights Program.*



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

MAY 03 2016

date

