

WATER PERMIT NO. 1900-1

Name of Applicant: **City of Deadwood**

Address: **102 Shermann St, Deadwood SD 57732**

Phone: **605 578-2600**

Amount of Water Claimed: **0.1 cfs**

Total Acres: **NA**

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

Water to be used for: **municipal, suburban housing development**

County: **Lawrence**

Type of Waste Disposal System:

Location: **2 miles northeast of Deadwood**

PRIORITY

Date Received: **10-30-08**

Application/License Fee: **\$100**

Corrected Application Received:

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

Remarks: **City of proposing to supply untreated water to Oak Mountain sub-division using the existing well authorized by Water Right No. 1702-1**

Diversion Point: **SW ¼ SE ¼ Sec 18-T5N-R4E**

Land to be Irrigated: **NA**

Depth of Well: **315 feet deep**

Well Driller: : **Taylor Drilling**

Remarks:

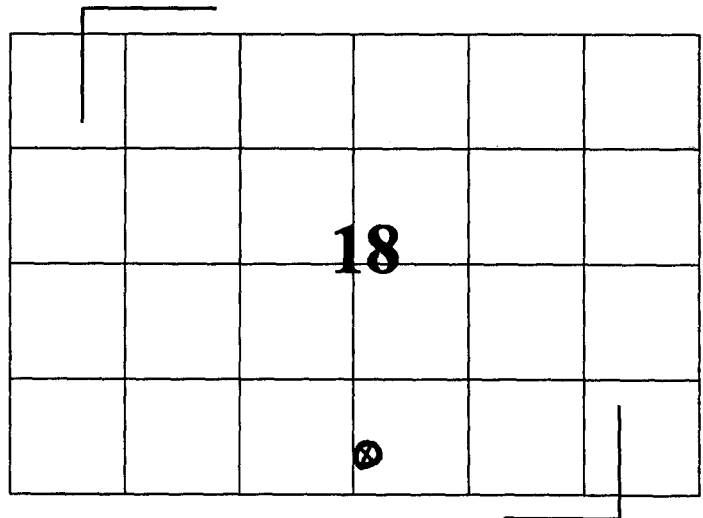
Type of Map: **aerial**

Prepared by: **Jim Raysor**

Reviewed and the Number Assigned on: **10-30-08**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>1900-1</u>	(office use only) Hydrologic Unit <u>10120202</u>
	Basin <u>Belle Fourche</u>	
	Newspaper <u>Lawrence Co. Journal 376 Main #A</u>	
	<u>605-578-3305</u>	<u>Deadwood 57732</u>

RECEIVED
OCT 30 2008
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.)

Propose to change use of well from seasonal irrigation to year round domestic use.

- Name of Applicant City of Deadwood Phone (605) 578-2600
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 102 Sherman Street Deadwood State SD 57732
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.1 ~~1~~ *CFS or 45 **GPM N/A ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Lawrence
SW 1/4 SE 1/4 Sec 18 Twp 5N Range 4E
- County or counties where water will be used Lawrence
- Annual period during which water is to be used year round Jan 1 - Dec 31
- 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)

Deadwood is proposing to provide untreated water to Oak Mountain sub-division. Oak Mountain will treat, store and distribute the water.

STATE OF SOUTH DAKOTA)
County of _____ SS

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

I, Jim Raysoe - PWD, 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 Jim Raysoe

Subscribed and sworn to before me this 21 day of October 2008

Mary Jones
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 1900-1

Date of first receipt of application October 30, 2008.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1900-1 to City of Deadwood, 102 Sherman St, Deadwood SD 57732 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. 1900-1 appropriates 0.1 cubic feet of water per second (45 gallons per minute) from one well completed into the Deadwood Formation (1075 feet deep) located in SW 1/4 SE 1/4 Section 18-T5N-R4E for municipal use. Water Right No. 1702-1 appropriates 0.026 cubic feet of water per second (cfs) from this existing well completed into the Deadwood aquifer, located in the SW 1/4 SE 1/4 Section 18, T5N-R4E. Water from the well is currently used for municipal use (cemetery irrigation) by the City of Deadwood from June 1 to August 31 annually. Permit No. 1900-1 increases the appropriation from the existing well to allow a diversion rate of 0.10 cfs from January 1 to December 31 annually. This permit authorizes water for municipal use (serve Oak Mountain Sub-division) in addition to its present use at the cemetery.
2. The water appropriated shall be used for the purpose of municipal 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. 1900-1 is January 26, 2009.
5. The date from which applicant may claim right is October 30, 2008.
6. One-fifth of the construction is to be completed on or before July 26, 2011.
7. All construction is to be completed on or before January 26, 2014.
8. Water is to be put to beneficial use on or before January 26, 2018.
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 city of Deadwood shall report to the Chief Engineer annually the amount of water withdrawn from the Deadwood Formation.
3. Permit No. 1900-1 is subject to compliance with South Dakota Drinking Water Standards.

WATER MANAGEMENT BOARD

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

JUN 15 2009
date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 8-3/4 inch Depth 315 feet
- b) Casing Type steel Diameter 7 inches Thickness 0-315 feet
- c) Screen Type steel Diameter 5.5 inches Thickness 315-1060 ft
- d) Gravel Pack cement Length of Gravel Pack to 315 feet
- e) Depth to Top of Water Bearing Material 200 feet
- f) Depth to Water (ground surface to water level) 60 feet
- g) Distance to nearest existing domestic well:
On applicants property N/A On property owned by others approx. 700 feet

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

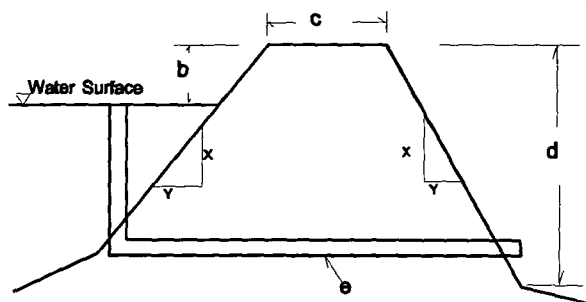
3. Dugout Information

- 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 _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



PHILLIPS, JAMES T & NANCY A
LOEFFEN, MICHAEL J & RITA A

WHITE ROCKS PROPERTIES LLP

LOGAN, WILLIAM M & LORI M

BURNS, RONALD E & DAWN M

HOGAN, STEVEN M & SHARON A

WHITE ROCKS PROPERTIES LLP

MUIR, WILLIAM M & LUBY D

TECH, ROBERT D

KREMLACEK, ALAN & CAROL

WATKINS, THOMAS F & DOROTHY C

KRATZ, JAMES J & CAROL

FISHER, GARY R

CITY OF DEADWOOD

DEADWOOD SD CONGREGATION OF JEHOVAH'S WITNESSES

BELTHER NO

WELL LOCATION

FISHER, GARY R & CYNTHIA L

Jim A. Ryan
PUBLIC WORKS DIR.

Hwy 14

MORRIS, JACK & KIM

SUNDERMAN, ALLAN P & JOAN A

HENRY, PAUL M & STACEY D

SUNDERMAN, ALLAN P & JOAN A

KIRBY, PAMELA J

SUNDERMAN, ALLAN P & JOAN A

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/30, 20 08

RECEIVED OF City of Deadwood Finance Office Deadwood SD 57732

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

Fee for Application for Permit No. <u>1900-1</u> 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. <u>1900-11</u>	50	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	100 00

No.

03704

By

Harold Erbe
Chief Engineer

CITY OF
DEADWOOD

PUBLIC WORKS DEPARTMENT

67 Dunlop Avenue
Deadwood, South Dakota 57732
Phone (605) 578-3082 • Fax (605) 578-3101

October 27, 2008

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OCT 30 2008

**WATER RIGHTS
PROGRAM**

Water Rights Program
Attn: Mr. Eric Gronlund
Joe Foss Building
523 East Capital
Pierre, SD 57501-3181

Dear Eric:

I have enclosed the city of Deadwood's Water Rights application to appropriated water from our existing Oak Ridge Cemetery well for domestic use by the Oak Mountain Sub-Division. If there are any discrepancies in this application please let me know and they will be addressed.

The well currently does not meet the drinking water standards for domestic use. Oak Mountain subdivision will address that in the treatment process. They have an agreement with the Sanitary District to treat the brine from their treatment process. The city is basically selling the subdivision raw water.

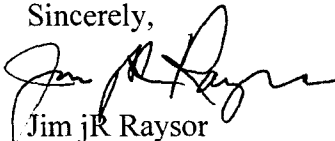
Oak Mountain has quantity and quality problems with their present well. This will address both issues for the subdivision. The city would also continue to use the water for limited irrigation at the cemetery.

Currently Oak Mountains well produces less than 10 GPM. I would anticipate that they would double that rate at peak demand. Should the cemetery be irrigated at the same time I am confident that we would not exceed 30 GPM but have requested the water right for 45 GPM allowing for some expansion of the subdivision.

Thank you for your assistance to date. Certainly you understand the term Public Servant and those of us who have are working through the process do appreciate your help.

Should you have a need to contact me you could call my office but I am easier to locate on my cell at 920-0010.

Sincerely,



Jim J. Raysor
Public Works Director
City of Deadwood, SD
jimr@cityofdeadwood.com

CITY OF
DEADWOOD

FINANCE OFFICE

DEADWOOD CITY HALL
102 Sherman Street
Deadwood, South Dakota 57732
Phone (605) 578-2600 • Fax (605) 578-2084

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FEB - 5 2009

WATER RIGHTS
PROGRAM

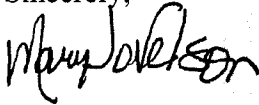
February 3, 2009

Eric Gronlund
Natural Resources Engineer
PMB 2020
Joe Foss Bldg
Pierre, SD 57501-3182

Dear Mr. Gronlund:

Enclosed is a copy of your letter regarding publication of 1900-01 as well as the information and affidavit of publication from our official newspaper. If you need any other information please feel free to give me a call.

Sincerely,



Mary Jo Nelson
Finance Officer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1900-1, City of Deadwood**

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. 1900-1, City of Deadwood, c/o Jim Raysor, Public Works Director, City of Deadwood, 102 Sherman Street, Deadwood SD 57732

The Chief Engineer is recommending APPROVAL of Application No. ¹⁹⁰⁰⁻¹~~7077-3~~ 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 city of Deadwood shall report to the Chief Engineer annually the amount of water withdrawn from the Deadwood Formation.
3. Permit No. 1900-1 is subject to compliance with South Dakota Drinking Water Standards.

See report on application for additional information.

Garland Erbele, Chief Engineer
December 23, 2008

NOTE: The water produced by this well exceeds the MCL for Gross Alpha, combined Radium 226/228 and Fluoride. The application states that the city will provide untreated water to Oak Mountain Sub-division. Either Oak Mountain or the city will need to treat the water to meet SD Drinking Water Standards. I encourage you to contact the Mark Mayer with the Drinking Water Program at (605) 773-3754 to discuss these regulations.

REPORT FOR WATER PERMIT APPLICATION NO. 1900-1
CITY OF DEADWOOD
NOVEMBER 5, 2008

Water Right No. 1702-1 appropriates 0.026 cubic feet of water per second (cfs) from an existing well completed into the Deadwood aquifer, located in the SW¼ SE¼ Section 18, T5N-R4E. Water from the well is currently used for municipal use (cemetery irrigation) by the City of Deadwood from June 1 to August 31 annually. Permit Application No. 1900-1 proposes to increase the appropriation from the existing well to allow a diversion rate of 0.10 cfs from January 1 to December 31 annually. This application proposes to use the water for municipal use (serve Oak Mountain Sub-division).

AQUIFER: DEADWOOD FORMATION

General

The Deadwood aquifer is a major regional aquifer that occurs within the porous and permeable portions of the Deadwood Formation. The Deadwood is a Cambrian aged formation consisting of sandstone, shale and shaley limestone. The Deadwood is laterally extensive and underlies most of western South Dakota. The formation underlies approximately 428,800 acres of Lawrence County and contains an estimated 7,504,000 acre feet of recoverable water in storage in the county alone (Allen and others, 1985). The completion report filed for this existing well suggests the top of the Deadwood Formation is approximately 490 feet below grade at this site. The Deadwood outcrops approximately one mile west of this well site and also within approximately one mile south of this site (Strobel and others, 1999). A Tertiary aged igneous intrusive has produced a domal structure (Whitewood Peak) centered just over one mile north of this well. The dome has resulted in a Deadwood outcrop approximately three-fourths of a mile north of this well (Darton, 1925). Faults associated with the intrusive have been identified between this well and Whitewood Peak. The faulting appears to have completely displaced the Deadwood Formation (Darton, 1925). The impact that these intrusives and faults have on the hydrology is not clear. The aquifer is under confined conditions in this area and some of the wells, including this one, free flow.

Recharge to the Deadwood aquifer, which occurs through direct infiltration of precipitation at the outcrop area and to a minor extent streamflow loss has been estimated to be 14,500 acre-feet per year (Driscoll and Carter, 2001).

There is limited aquifer test data available for wells in the Deadwood, and aquifer characteristics are not available. The quality of the water in the Deadwood Aquifer is also difficult to assess due to the limited amount of data. The concentration of common ions in the Deadwood Aquifer water in this area appears to be quite low, with analysis from area wells indicating total dissolved solids of less than 500 ppm. The water quality probably deteriorates rapidly within a few miles downdip of the recharge area. Analysis of water from this well indicate that the Gross Alpha level, the Radium 226/228 concentration and the Fluoride concentration all exceed their respective established maximum contaminate levels (DENR-Office of Drinking Water, 2008). Before a certificate of approval for a new water system is issued allowing the use of water from this well for a public water system, water treatment may be required (Kittay).

Water Availability:

Development of the Deadwood aquifer has generally been limited to a fairly small area in or near the outcrop area due to the fact that most of the aquifer is overlain by productive aquifers. Relatively few wells have been completed into the Deadwood aquifer and the water use from the Deadwood Formation is fairly low. The aquifer is utilized primarily for domestic use near the outcrop area, however, there are 36 Water Rights/Permits appropriating water from the Deadwood aquifer in South Dakota. All of the appropriations from the Deadwood are from Lawrence (12), Meade (3), Pennington (20) and Custer (1) counties. Water use by appropriate rights/permits include: 14 permits/rights for commercial use; 17 permits/rights for suburban housing developments; one permit for institutional use; one water right for domestic use; one water right for irrigation use; one water right for municipal use and one water right for RWS use. The combined diversion rate of these appropriate rights totals 4.90cfs (Water Rights, 2008b). It is doubtful that the combined use from the Deadwood exceeds 2,500 acre-feet per year.

A simple comparison between estimated average annual recharge (14,500 ac-ft/yr) and estimated annual withdrawals (2,500 ac-ft/yr) indicates that unappropriated water is available from the Deadwood aquifer.

The Water Rights Program monitors five observation wells completed into the Deadwood Aquifer in the Black Hills (Water Rights, 2008a). The nearest of these wells is located approximately 13 miles southwest of this well site. The hydrograph of the observation well is shown in figure one. The hydrograph shows that the water levels have fluctuated about seven feet in response to climatic conditions over the period of record.

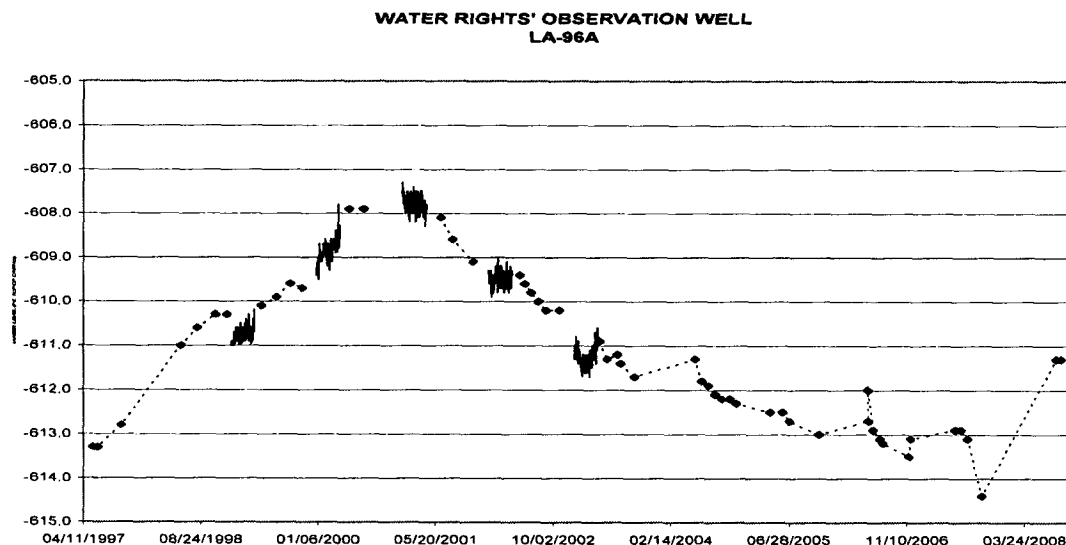


Figure 1. Hydrograph of a Deadwood aquifer observation well located approximately 13 miles southwest of the well that is to be used for 1900-1.

Data from observation wells indicate the potentiometric surface of the Deadwood aquifer fluctuates seasonally in response to recharge events, with the highest water level occurring in late spring-early summer, and the lowest water level occurring in late winter-early spring. The water levels are generally higher in “wet” years and are generally lower in “dry” years. Observation

well data suggest that at the existing level of development, natural influences dominate the water levels of the aquifer and the effects of pumping as yet are not obvious. The observation well data indicates that water is available for this appropriation.

Affects on Existing Rights:

There are a number of domestic wells completed into the Deadwood aquifer in this area (Water Rights, 2008c). There are five Water Rights appropriating groundwater within approximately three miles of the well that is to be used to supply this proposed permit (Water Rights, 2008b). They are shown in table one.

PERMIT NO	NAME	AQUIFER	USE	CFS
1863-2	SEVENTY-SIX RANCH ESTATE	MDSN	SHD	0.07
1596-1	RADIO TOWER HOMEOWNER'S	DDWD	SHD	0.09
1623-1	OAK MOUNTAIN COUNTRY ESTATES	DDWD	SHD	0.04
1702-1	CITY OF DEADWOOD	DDWD	MUN	0.03
1725-1	ASPEN VIEW SUBDIVISION	DDWD	SHD	0.02

Table one. Water Rights within approximately three miles of 1900-1

Since the Deadwood is under confined conditions the drawdown cone caused from pumping a well may extend some distance from the pumped well. Interference from pumping this Deadwood well is not expected to be a problem for adequate wells in the area because of the relatively low diversion rate proposed by this application (45 gallons per minute) and the distance between wells.

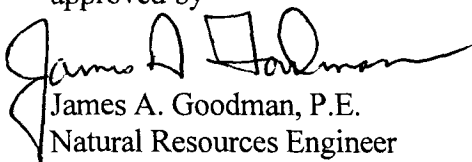
CONCLUSIONS:

1. The Deadwood aquifer is a viable aquifer in this area and unappropriated water is available for this appropriation.
2. Existing water rights, including domestic use, are not likely to be adversely impacted if Water Permit Application No. 1900-1 is approved.
3. The water produced by this well exceeds the MCL for Gross Alpha, combined Radium 226/228, and Fluoride.



Ken Buhler
Natural Resources Engineer

approved by



James A. Goodman, P.E.
Natural Resources Engineer

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1985, 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
- Darton, N.H., and Paige, S, 1925, Teologic Atlas of the United States, Central Black hills Folio, South Dakota: USGS H no. 219, 34 p., [11] leaves of plates
- DENR-Office of Drinking Water, 2008, Water Analyses Data for "Deadwood/Oakridge" well
- Driscoll, D.G., and Carter, J.M., 2001, Hydrologic conditions and Budgets for the Black Hills of South Dakota, Through Water Year 1998: U.S. Geological Survey Water Resources Investigations Report 01-4226, 143 p.
- Kittay, Robert. SD DENR-Drinking Water Office. Personal interview. 19 Nov. 2008.
- Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-743, 3 sheets, scale 1:100,000
- Water Rights Program, 2008a, "Observation Well Files", DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2008b, "Water Right/Permit Files", DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2008c, "Well Completion Report Files", DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF LAWRENCE

RECEIVED
JAN 15 2009
WATER RIGHTS
PROGRAM

Teri Adler, being duly sworn, says: That the *Lawrence County Journal* is, and during all times hereafter mentioned, was a legal newspaper as defined in SDCL 17-2-2, as amended, published at Spearfish, Lawrence County, South Dakota, by Lee Enterprises; that affidavit is and, during all of said times, was employed as Customer Service Representative by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper for successive issues, bearing the following dates:

January 07,	200	9	_____	200	_____
January 14,	200	9	_____	200	_____
_____	200	_____	_____	200	_____
_____	200	_____	_____	200	_____
_____	200	_____	_____	200	_____

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 51.24, insures solely to the benefit of the publisher of said newspaper; that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

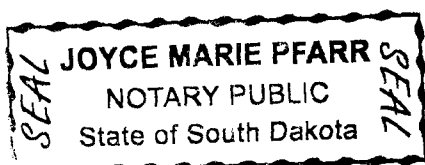
Teri Adler
Customer Service Rep

Subscribed and sworn to before me this

14th day of January, 2009

Joyce Marie Pfarr
My commission expires. 08/14/2012

Notary Public, South Dakota



Account No. 60004393

Total Amount \$ 51.24

NOTICE OF APPLICATION NO. 1900-1 to Appropriate Water

Notice is given that the City of Deadwood, 102 Sherman St, Deadwood SD 57732 has filed an application for a water permit to appropriate 0.1 cubic feet of water per second (45 gallons per minute) from one well completed into the Deadwood Formation (1075 feet deep) located in SW 1/4 SE 1/4 Section 18-T5N-R4E for municipal use. Water Right No. 1702-1 appropriates 0.026 cubic feet of water per second (cfs) from this existing well completed into the Deadwood aquifer, located in the SW 1/4 SE 1/4 Section 18, T5N-R4E. Water from the well is currently used for municipal use (cemetery irrigation) by the City of Deadwood from June 1 to August 31 annually. Permit Application No. 1900-1 proposes to increase the appropriation from the existing well to allow a diversion rate of 0.10 cfs from January 1 to December 31 annually. This

application proposes to use the water for municipal use (serve Oak Mountain Sub-division) in addition to its present use at the cemetery.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1900-1 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 January 26, 2009.

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 Wed., Jan. 7
& Wed. Jan 14, 2009
Lawrence County Journal**



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

December 24, 2008

Lawrence County Journal
376 Main Suite A
Deadwood SD 57732

ATTENTION: Legal Public Notice

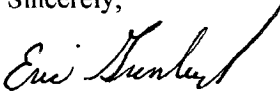
Enclosed is a Notice on Application No. 1900-1 to Appropriate Water to be published twice. Please publish the first notice on January 7, 2009 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is City of Deadwood, c/o Jim Raysor, 102 Sherman St., Deadwood SD 57732 (Ph # 605-578-2600).

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
Natural Resources Engineer
605 773-3352

enclosures

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

No. 1900-1

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

Date _____

We are in receipt of your letter of December 24, 2008 enclosing Notice to Appropriate Water by Application No. 1900-1 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
www.state.sd.us/denr

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

December 24, 2008

City of Deadwood
c/o Jim Raysor
102 Sherman St
Deadwood SD 57732

Dear Mr. Raysor:

Water Permit Application No. 1900-1 for municipal 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 Lawrence County Journal printed at Deadwood SD (Ph # 605-578-3305). 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
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.

Instruction to Newspaper - Publish first Notice on January 7, 2009 with the second publication 7 days later. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 1900-1 to Appropriate Water

Notice is given that the City of Deadwood, 102 Sherman St, Deadwood SD 57732 has filed an application for a water permit to appropriate 0.1 cubic feet of water per second (45 gallons per minute) from one well completed into the Deadwood Formation (1075 feet deep) located in SW ¼ SE ¼ Section 18-T5N-R4E for municipal use. Water Right No. 1702-1 appropriates 0.026 cubic feet of water per second (cfs) from this existing well completed into the Deadwood aquifer, located in the SW¼ SE¼ Section 18, T5N-R4E. Water from the well is currently used for municipal use (cemetery irrigation) by the City of Deadwood from June 1 to August 31 annually. Permit Application No. 1900-1 proposes to increase the appropriation from the existing well to allow a diversion rate of 0.10 cfs from January 1 to December 31 annually. This application proposes to use the water for municipal use (serve Oak Mountain Sub-division) in addition to its present use at the cemetery.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1900-1 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 January 26, 2009.

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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUN 15 2009

City of Deadwood
c/o Jim Raysor
102 Sherman St
Deadwood SD 57732

Dear Mr. Raysor:

Enclosed is Water Permit No. 1900-1 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 Erbe, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Permit Nos. 1900-1
Upper Cheyenne River - Water District

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

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

I have on this day, 9/14/2015, made a thorough examination of the water use system constructed by City of Deadwood, 102 Sherman Street, Deadwood, SD 57732 holder of Permit no. 1900-1, bearing the priority date of October 30, 2008. Water Right No. 1702-1 is currently authorized to appropriate 0.026 cfs for municipal use with a period of use from June 1 to August 31. Permit No. 1900-1 is authorized to increase the appropriation to a total of 0.1 cfs (45 gpm) from one well (Deadwood Formation) and expand the period of use January 1 to December 31 annually, for municipal purposes, in Lawrence County.

Inspection contact and relationship to
permit holder, if applicable:

Donovan Renner,
City Water Superintendent

A. Works used to divert the water:

AY Macdonald submersible pump 45 gpm capacity (0.1 cfs).

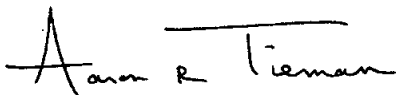
B. Works used to transport water to place of use:

Municipal distribution lines.

The system is in the following condition good. The point of diversion (well) for Permit No. 1602-1 is located specifically at Lat/Lon – N44.388855/W-103.679534 which is the approximately 450 feet north and 2575 feet west of the SE corner of Section 18, T5N-R4E. The works are capable of diverting 0.1 cfs which is to be used for municipal purposes. The license should be issued for 0.1 cfs.

All structures, wells and lands on map Y
Exceptions to compliance are: none.

Comments: Combined with Water Right No. 1702-1 this permit increases total appropriation to 0.1 cfs. Applicable portions of Water Right No. 1702-1 should be incorporated into Water Permit No. 1900-1.



Aaron Tieman
Natural Resources Engineer II
DENR, Water Rights Program

Date report completed: September 28, 2015

FIELD INVESTIGATION REPORT FOR PERMIT NO. 1900-1

DATE OF INVESTIGATION:	September 14, 2015
NAME & ADDRESS OF PERMIT HOLDER	City of Deadwood 102 Sherman Street Deadwood, SD 57732
INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Donovan Renner, City Water Superintendent
DIVERSION POINT LEGAL LOCATION	SW¼ SE¼ Section 18, T5N-R4E
WATER SUPPLY SOURCE	Groundwater, Deadwood Formation

Other permit(s) associated with the project: **1702-1 for City of Deadwood.**

WELL INFORMATION:

- 1) Well Drilling Firm: **Taylor Drilling**
- 2) Number of Wells: **One**
- 3) Depth(s): **1080** feet
- 4) Well log available: **yes**

Casing:

- 1) Diameter: **5½** inches **7** inches
- 2) Length: **1060** feet **315** feet
- 3) Type: **Steel** **Steel**

Screen:

- 1) Type: **Open hole**
- 2) Length: **N/A** feet
- 3) Static water level: **40** feet

Pump:

- 1) Make: **AY Macdonald**
- 2) Model:
- 3) Capacity: **45** gpm

Motor:

- 1) Make: **Franklin**
- 2) Model: **51684516541**
- 3) Horsepower rating: **3** hp

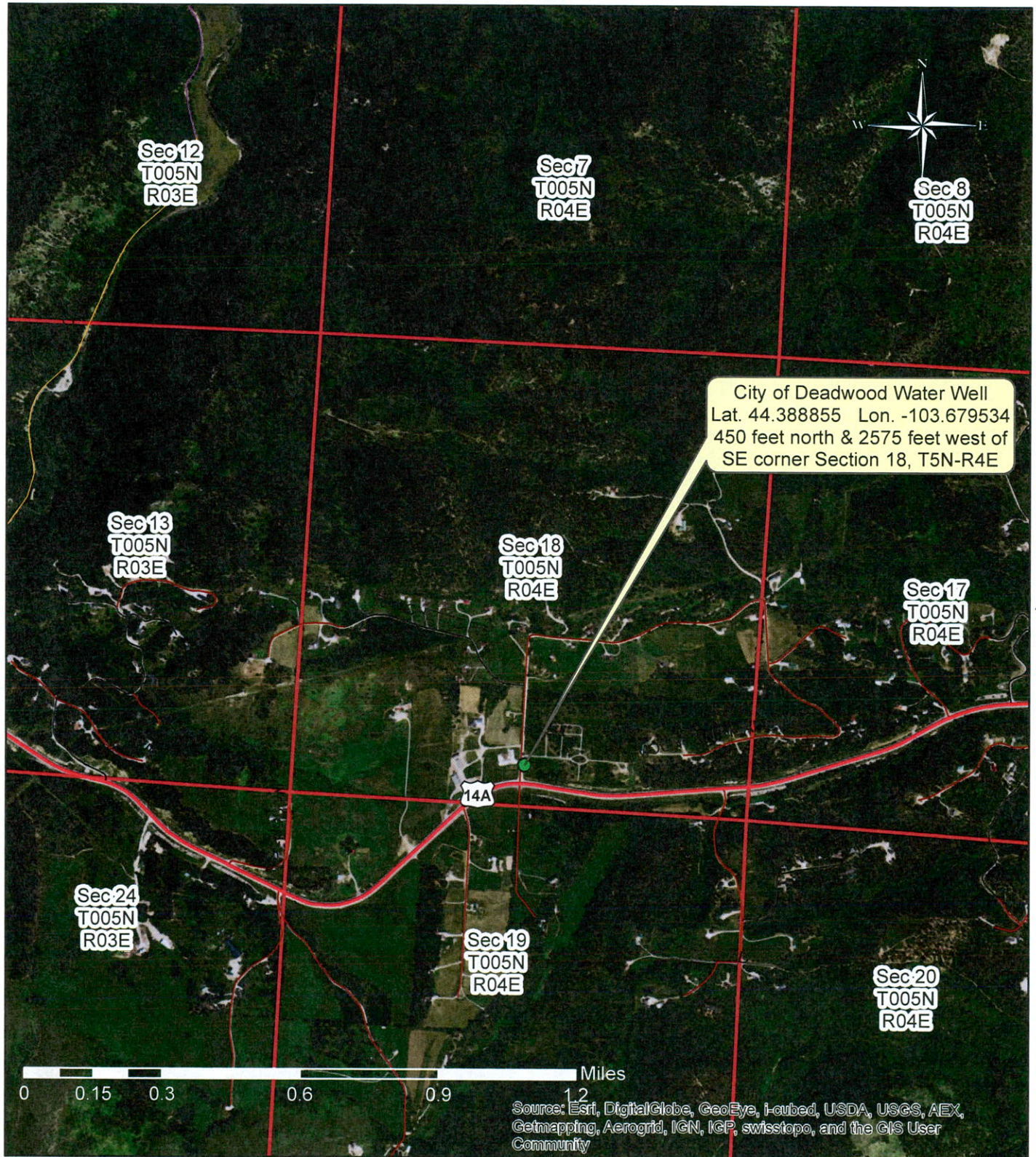
DISTRIBUTION LINES OR CANALS:

- 1) Type: **Municipal distribution lines.**

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by **Yes**
- 2) All structures, wells and lands on map **Yes**

Water Right 1900-1
City of Deadwood
September 28, 2015



Aaron R. Tieman

Aaron Tieman
Natural Resources Engineer II
DENR Water Rights Program



1900-1



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

OCT 19 2015

1702-1
1900-1

Mary Jo Nelson, Finance Officer
City of Deadwood
102 Sherman St
Deadwood SD 57732

Dear Ms. Nelson:

Enclosed is Water License No. 1900-1. This is the final water right document completing the process of obtaining a Water Right. Included with the license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 1900-1, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

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

enclosures

Note: Upon licensing, the applicable portions of Water Right No. 1702-1 were incorporated into Water License No. 1900-1.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 1900-1**

(1) The City of Deadwood, 102 Sherman Street, Deadwood, SD 57732 made Application No. 1900-1, October 30, 2008 for a water permit to divert 0.10 cubic feet of water per second (45 gallons per minute) from ground water – one existing well (Deadwood Formation), Lawrence County, South Dakota for municipal purposes. Permit No. 1900-1, with a priority date of October 30, 2008 was approved January 26, 2009 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before January 26, 2014 and for the application to beneficial use of said water on or before January 26, 2018.

The well utilized under Water Permit No. 1900-1 is licensed under Water Right No. 1702-1 for use by the city in watering flowers and plants at Oakridge Cemetery from June 1st through August 31st each year. Water Permit No. 1900-1 was obtained to allow use of the existing well to provide water to Oak Mountain Sub-Division on a year round basis.

The applicable portions of Water Right No. 1702-1 are incorporated into this Water License No. 1900-1. The priority dates retained are as follows:

- November 12, 1999 (established under No. 1702-1) for 0.026 cfs for use from June 1st – August 31st at the cemetery;
- October 30, 2008 (established under No. 1900-1) for 0.10 cfs for use in supplying the Oak Mountain Sub-Division from January 1st – December 31st.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.10 cubic feet of water per second for beneficial use. The location of the diversion point is 450 feet north and 2,575 feet west of the SE corner of Section 18, T5N, R4E.

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 the City of Deadwood, 102 Sherman Street, Deadwood, SD 57732 the holder and/or owner of incorporated Water Right No. 1900-1 is issued a license to appropriate water, the divert a total of 0.10 cubic feet of water per second from ground water (one well – Deadwood Formation) with priority dates of November 12, 1999 (for use at the cemetery) and October 30, 2008 (supplying water to the Oak Mountain Sub-Division) from the location specified in (2) of this license for municipal purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1900-1 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

continued

- The city of Deadwood shall report to the Chief Engineer annually the amount of water withdrawn from the Deadwood Formation.
- Permit No. 1900-1 is subject to compliance with South Dakota Drinking Water Standards.

Jeanne Goodman

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

OCT 19 2015

date

