

File No. **50576** 15. Formation Code: **113** Drainage Basin: **Black Vermillion** County: **MS** Special Use: Stream:

16. Points of Diversion

T	MOD	DEL	ENT	PDIV	Qualifier	S	T	R	ID	'N	'W
CHK	88820	NC	N2	NW	SW	11	4S	10E	3	2340	4700 (GEO)
CHK	88821	NC	N2	NW	SW	11	4S	10E	4	2390	4700 Well 1
CHK	88822	NC	N2	NW	SW	11	4S	10E	5	2290	4700 Well 2

17. Rate and Quantity

Authorized		Additional		
Rate gpm	Quantity mgy	Rate gpm	Quantity mgy	Overlap PD Files
99	6	99	6	NA
99	6	99	6	NA
99	6	99	6	NA

18. Storage: Rate _____ NF Quantity _____ ac/ft Additional Rate _____ NF Additional Quantity _____ ac/ft

19. Limitation: **6 mgy** af/yr at _____ gpm (_____ cfs) when combined with file number(s) **MS-9 & 23643**
 Limitation: _____ af/yr at _____ gpm (_____ cfs) when combined with file number(s) _____

20. Meter Required? Yes No To be installed by **12/31/2023** Date Acceptable Meter Installed _____

21. Place of Use

T	MOD	DEL	ENT	PUSE	S	T	R	ID	NE¼				NW¼				SW¼				SE¼				Total	Owner	Chg? NO	Overlap Files
									NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼				
CHK	6912	11	4S	10E	1				City of Vermillion and Vicinity																	7a	N	MS 9, 23643

Comments: **11/3/2021 KJN***

KANSAS DEPARTMENT OF AGRICULTURE
Division of Water Resources

M E M O R A N D U M

TO: Files

DATE: October 27, 2021

FROM: Brandon Milner

RE: Application, File No. 50,576

The City of Vermillion has filed the referenced application to appropriate 6 million gallons of groundwater per calendar year at a diversion rate not to exceed 99 gallons per minute for municipal use from a proposed new battery of two wells. The proposed place of use overlaps Vested Water Right, File No. MS-9; and Water Right No. 23,643. The application form was signed applicant, stating that the City has access to the point of diversion.

Vested Water Right, File No. MS-04⁹ is authorized 2.5 million gallons, and Water Right No, File No. 23,643 is authorized 1.258 and 3.26 million gallons that is limited to 6 million gallons when combined with Vested Water Right File No. MS-04.⁹ The Kansas Municipal Water Use report indicates an average of 81 gpcd, for medium public water suppliers in Region 7S, as the applicant has estimated 97.1 gpcd. An estimated quantity of water can be determined as follows: Population of 100 x 97.1 gpcd x 365 days = 3.54 million gallons. However, the applicant has projected water needs of 6 million gallons by 2041 as the population of the area is set to rise in the area. A more accurate estimate could be described as 77 households X 2.75 (average head per household) X 81 gphd X 365=6.2 million gallons. The applicant has received a federal grant that the applicant will use to develop a new battery of two wells and is planning to abandon wells associated with Vested Water Right No. MS-04⁹ and Water Right No. 23,643.

The applicant did not identify any nearby wells, and there are no permitted wells within one-half mile of the proposed point of diversion. The only permitted groundwater rights within a two-mile radius are all owned by the applicant according to the WRIS database, with the nearest being over 4,300 feet away. Per the requirements in K.A.R. 5-4-4 for all other aquifers, the minimum well spacing should be 1,320 feet to non-domestic wells and 660 feet to domestic wells, and spacing is met.

Due to the well log that submitted with the application, and based on the geographical location of the well, the aquifer for this application is likely glacial till. There is a layer of sand and gravel extending from 137' to 154' to which the glacial aquifer is located. As per K.A.R. 5-3-11, the area of consideration was based on the extent of just the glacial aquifer, which was determined to be 8,042 acres. Existing water rights have appropriated 18.42 acre-feet, leaving 2,930.49 acre-feet available, and this application requesting 18.41 acre-feet complies with safe yield.

In accordance with K.S.A. 82a-706c, the Chief Engineer retains full authority to require any water user to install meters, gages, or other measuring devices, which devices he or she or his or her agents may read at any time. Water flowmeter requirements are further described in K.A.R. 5-1-4 through K.A.R. 5-1-12. If any chemical or foreign substance is injected into the water pumped under this permit, a check valve will also need to be installed.

Katie Tietsort, Water Commissioner of the Topeka Field Office, recommended approval of the referenced application in a October 29, 2021 e-mail. Based on the above discussion, the application complies with rules and regulations, and approval of the application will not impair senior water rights nor prejudicially or unreasonably affect the public interest, it is recommended that the referenced application be approved.

11/3/2021 KJN*

Brandon Milner
Environmental Scientist
Manhattan Headquarters

From: Tietsort, Katie [KDA]
Sent: Fri 10/29/2021 12:22 PM
To: Milner, Brandon [KDA]
Subject: RE: 50576 Recommendation

The water conservation plan- I am not seeing that anywhere either. Just that it was approved by the KWO.

Katie Tietsort

Water Commissioner

Katie.Tietsort@ks.gov

Ph. 785-296-5733 Cell 785-213-9188

Kansas Department of Agriculture

Topeka Field Office

1131 SW Winding Rd, Suite 400

Topeka, KS 66615

From: Milner, Brandon [KDA] <Brandon.M.Milner@ks.gov>

Sent: Friday, October 29, 2021 11:52 AM

To: Tietsort, Katie [KDA] <Katie.Tietsort@ks.gov>

Subject: RE: 50576 Recommendation

I will look for that map for you! Is the average of 2.75 people per household in the regs? So $70 \times 2.75 \times 81$ Gphd $\times 365 = 6.2$ million gallons.

From: Tietsort, Katie [KDA] <Katie.Tietsort@ks.gov>

Sent: Friday, October 29, 2021 11:02 AM

To: Milner, Brandon [KDA] <Brandon.M.Milner@ks.gov>

Subject: RE: 50576 Recommendation

Brandon- is there the required map showing the pds anywhere? Am I missing it?

The quantity and whether it is justified and limitation:

KWO stats are 81 GPCD for this size supplier in their region. and GPCD for 7S is 81. Using their population data of projected 120 people $\times 81 \times 365 = 3.548$ MGY, but a better estimate might be described as the household connections of 70 households that could grow reasonably by 10 percent to 77 households.

77 households times the average 2.75 people per household $\times 365 = 6$. MGY so the requested 6 MGY is reasonable.

The file should be limited to 6.0 MGY when combined with File Nos. MS-09 & 23643.

Table 3: Gallons per capita per day by public water supplier – continued

Public Water Supplier	DWR ID	EPA Water System Number	GPCD Region ¹	Source water RPA	Gallons per capita-day					Average (2013 – 17)	In Regional Average
					2013	2014	2015	2016	2017		
Utica	18454	KS2013502	4	Gb	242	227	207	207	237	224	Y
Valley Center	18473	KS2017318	7M	Ew	58 ²	57 ²	52 ²	37 ²	40 ²	49	Y
Valley Falls	18474	KS2008710	8M	Ks	99	91	80	84	80	87	Y
Vermillion	22017	KS2011701	7S	Ks	98	94 ²	104 ²	119 ²	125	108	Y
Victoria	18587	KS2005119	5	Ss	84	58	55	55	50	60	Y
Viola	18599	KS2017313	7S	Ew	95	81 ²	68 ²	69 ²	71 ²	77	Y
Virgil	21302	KS2007307	7S	Ve	77	59 ²	47	47 ²	46	55	Y
Wabaunsee Co. RWD #01	15244	KS2019706	7S	Ks	105	101	na	97	91	99	Y

vermillion is 7S

Table 1: Average GPCD for public water suppliers by region and size, 2013-2017

Region ¹	Year					Average
	2013	2014	2015	2016	2017	
1	275	258	239	245	213	246
2	238	224	209	205	184	212
3	218	209	207	193	186	202
4	175	160	151	141	154	156
5	133	121	121	111	114	120
6ML	129	133	128	126	132	130
6S	116	120	124	111	109	116
7L	120	127	121	120	119	121
7M	94	95	90	91	92	92
7S	84	83	78	80	79	81
8L	115	116	105	108	103	109
8M	88	89	85	84	83	86
8S	72	72	71	69	71	71
Kansas³	111	110	106	103	102	106

¹Large suppliers (L) serve 10,000 persons or more. Medium (M) suppliers serve 500 to 9,999 persons. Small (S) suppliers serve fewer than 500 persons.

²Medium and large are combined because of limited number of systems in region

³State-wide GPCD is computed as the average of public-water supplier's GPCDs specified for use in a regional average

Katie Tietsort

Water Commissioner

Katie.Tietsort@ks.gov

Ph. 785-296-5733 Cell 785-213-9188

Kansas Department of Agriculture

Topeka Field Office

1131 SW Winding Rd, Suite 400

Topeka, KS 66615

From: Milner, Brandon [KDA] <Brandon.M.Milner@ks.gov>

Sent: Thursday, October 28, 2021 2:31 PM

To: Tietsort, Katie [KDA] <Katie.Tietsort@ks.gov>

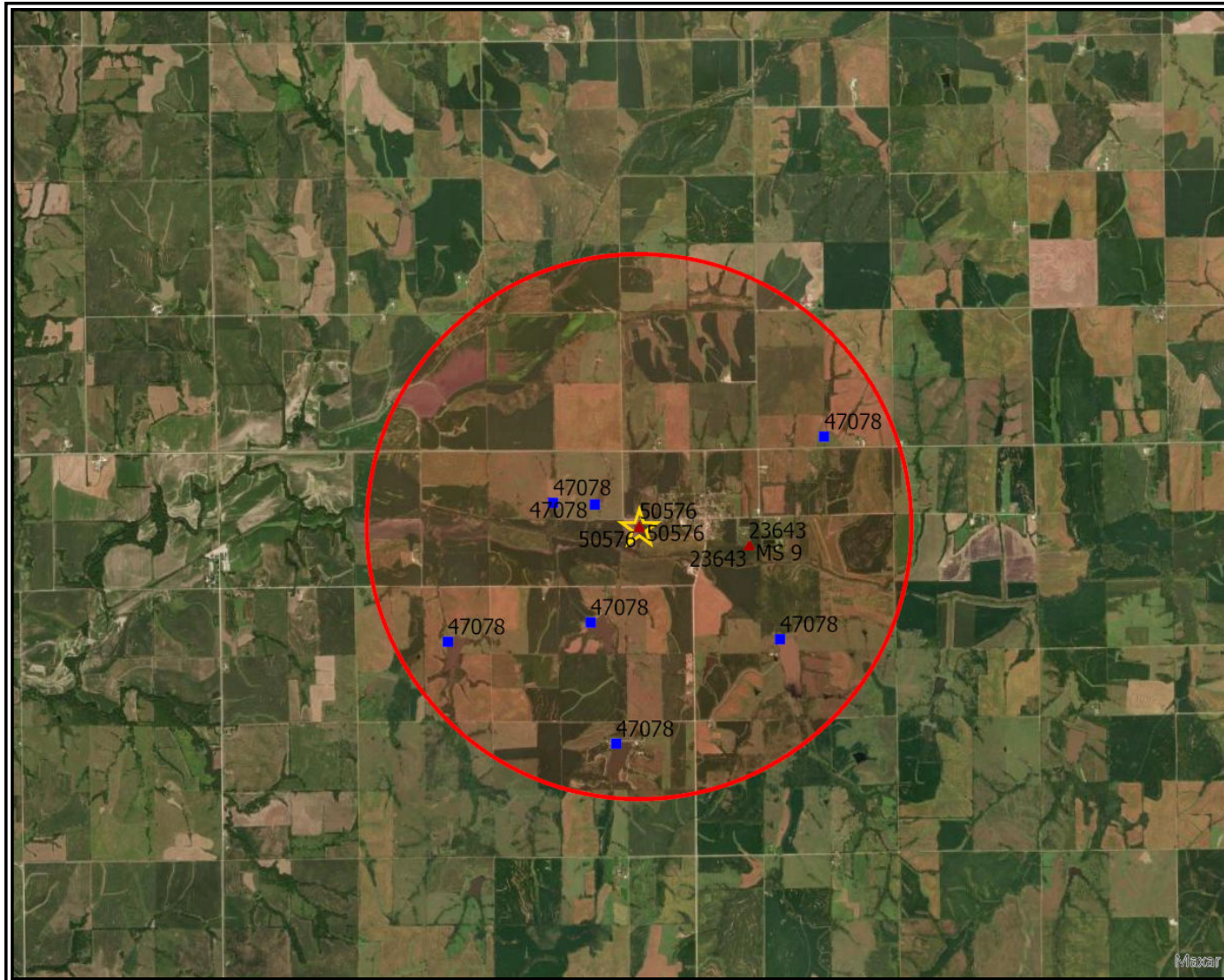
Subject: 50576 Recommendation

Good afternoon Katie,

Attached is a memo for application no. 50,576 for the city of Vermillion. I will admit that I'm not 100% on working on municipal applications so please let me know if anything needs added to the memo or any additional information is needed. Otherwise could you provide a recommendation on this? Thanks!

Brandon Milner
Environmental Scientist
Water Appropriation Program

Safe Yield Report Sheet
Water Right- Proposed Point of Diversion
Point of Diversion in 11-04S-10E
Footages from SE corner- 2,340 feet North 4,700 feet West



Analysis Results

The selected PD is in an area OPEN to new appropriations.

The safe yield based on the variables listed below is 2,948.91 AF.

Total prior appropriations in the circle is 36.83 AF. $36.83 - 18.41 = 18.42$ Prior Use

Total quantity of water available for appropriation is 2,912.08 AF. $+18.41 = \underline{2930.49}$ AF

Safe Yield Variables

The area used for the analysis is set at 8,042 acres.

The potential annual recharge at the circle center is estimated to be 4.4 inches.

The percent of recharge available for appropriation is 100%.

Authorized Quantity values are as of 27-OCT-2021 and are based on Appropriated and Vested ground water right and possible stream nodes for GMD #2. Domestic, Term and Temporary water rights have been excluded.

There are 3 water rights and 5 points of diversion within the circle.

File Number	Use	ST	SR	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Qind	Auth Quant	Add Quant	Tot Acres	Net Acres
A 23643 00	MUN NK	G		SE	NE	SE		1500	450	11	04	10E	1	PD	3.86	3.86		
Same	MUN NK	G		SE	NE	SE		1600	400	11	04	10E	2	PD	10.01	6.88		
V MS 9 00	MUN AA	G		SE	NE	SE		1500	450	11	04	10E	1	WR	7.67	7.67		
A 50576 00	MUN AY	G	NC	N2	NW	SW		2340	4700	11	04	10E	3	WR	18.41	18.41		
Same	MUN AY	G	NC	N2	NW	SW		2390	4700	11	04	10E	4	WR				
Same	MUN AY	G	NC	N2	NW	SW		2290	4700	11	04	10E	5	WR				

Limitations

File Number	Seq Num	Limitations
A 23643 00	2	63GPM COM/W #MS 009
Same	3	6 MGY COM/W #MS 009

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Secretary of Agriculture

DIVISION OF WATER RESOURCES
Earl D. Lewis Jr., Chief Engineer

**APPROVAL OF APPLICATION
and
PERMIT TO PROCEED**

(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application, **File No. 50,576** of the applicant

**CITY OF VERMILLION
102 MAIN ST
VERMILLION, KS 66544**

for a permit to appropriate water for beneficial use, together with the maps, plans and other submitted data, and that the application is hereby approved and the applicant is hereby authorized, subject to vested rights and prior appropriations, to proceed with the construction of the proposed diversion works (except those dams and stream obstructions regulated by K.S.A. 82a-301 through 305a, as amended), and to proceed with all steps necessary for the application of the water to the approved and proposed beneficial use and otherwise perfect the proposed appropriation subject to the following terms, conditions and limitations:

1. That the priority date assigned to such application is **May 11, 2021**.
2. That the water sought to be appropriated shall be used for municipal use within the City of Vermillion, Kansas, and immediate vicinity.
3. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of a battery of two (2) wells with a geographic center located near the center of the North Half of the Northwest Quarter of the Southwest Quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 11, more particularly described as being near a point 2,340 feet North and 4,700 feet West of the Southeast corner of said section, in Township 4 South, Range 10 East, Marshall County, Kansas, located substantially as shown on the map accompanying the application.
4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of **99 gallons per minute** (0.221 c.f.s.) and to a quantity not to exceed **6 million gallons** (18.41 acre-feet) of water for any calendar year.
5. That installation of works for diversion of water shall be completed on or before **December 31, 2023** or within any authorized extension thereof. The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of \$400.00 when construction of the works has been completed. Failure to timely submit the notice and the fee will result in revocation of the permit. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee of \$100.00.
6. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before **December 31, 2043** or any authorized extension thereof. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee of \$100.00.

7. That the applicant shall not be deemed to have acquired a water appropriation for a quantity in excess of the amount approved herein nor in excess of the amount found by the Chief Engineer to have been actually used for the approved purpose during one calendar year subsequent to approval of the application and within the time specified for perfection or any authorized extension thereof.

8. That the use of water herein authorized shall not be made so as to impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.

9. That the right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for the reasonable increase or decrease of the streamflow at the appropriator's point of diversion.

10. That this permit does not constitute authority under K.S.A. 82a-301 through 305a to construct any dam or other obstruction; nor does it grant any right-of-way, or authorize entry upon or injury to, public or private property.

11. That all diversion works constructed under the authority of this permit into which any type of chemical or other foreign substance will be injected into the water pumped from the re-diversion works shall be equipped with an in-line, automatic quick-closing, check valve capable of preventing pollution of the source of the water supply. The type of valve installed shall meet specifications adopted by the Chief Engineer and shall be maintained in an operating condition satisfactory to the Chief Engineer.

12. That an acceptable water flow meter shall be installed and maintained on the diversion works authorized by this permit in accordance with the Kansas Administrative Regulations 5-1-4 through 5-1-12 adopted by the Chief Engineer. This water flow meter shall be used to provide an accurate quantity of water diverted as required for the annual water use report (including the meter reading at the beginning and end of the report year).

13. That the applicant shall maintain accurate and complete records from which the quantity of water diverted during each calendar year may be readily determined and the applicant shall file an annual water use report with the Chief Engineer by March 1 following the end of each calendar year. Failure to file the annual water use report by the due date shall cause the applicant to be subject to a civil penalty.

14. That no water user shall engage in nor allow the waste of any water diverted under the authority of this permit.

15. That failure without cause to comply with provisions of the permit and its terms, conditions and limitations will result in the forfeiture of the priority date, revocation of the permit and dismissal of the application.

16. That the right to appropriate water under authority of this permit is subject to any minimum desirable streamflow requirements identified and established pursuant to K.S.A. 82a-703c for the source of supply to which this water right applies.

17. That the permit holder shall submit a progress report to the office of the Chief Engineer by March 1, following the tenth full calendar year after the permit was issued. The progress report must be submitted on a form prescribed by the Chief Engineer, and shall compare annual water use projected in the original application with the actual annual water use for the prior 10 years. The progress report must document compliance with the approved conservation plan, contain sufficient details to determine the extent of perfection of the water right during the previous ten years, and demonstrate how the water right, in association with other water rights, meets the municipal use need.

18. That this permit is limited such that all wells shall be located within a three hundred (300) foot radius circle, in the same local source of supply, and shall supply water to a common distribution system.

19. That the quantity of water approved under this permit is further limited to the quantity which combined with Vested Water Right, File No. MS-9 and Water Right No. 23,643, will provide **a total not to exceed 6 million gallons** of water per calendar year for municipal use as described herein.

Ordered this 8 day of November, 2021, in Manhattan, Riley County, Kansas.

Lane P. Letourneau

Lane P. Letourneau, P.G.
Water Appropriation Program Manager
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 8 day of November, 2021, by Lane P. Letourneau, P.G., Water Appropriation Program Manager, Division of Water Resources, Kansas Department of Agriculture.



Ashlee Freeman

Notary Public

1320 Research Park Drive
Manhattan, KS 66502
785-564-6700
www. agriculture.ks.gov



900 SW Jackson, Room 456
Topeka, KS 66612
785-296-3556

Mike Beam, Secretary

Laura Kelly, Governor

CITY OF VERMILLION
102 MAIN ST
VERMILLION, KS 66544

November 18, 2021
RE: Appropriation of Water, File No. 50,576

Dear Sir or Madam:

Enclosed is a permit authorizing you to proceed with construction of the proposed diversion works and to appropriate water for beneficial use as set forth in the permit. Your attention is directed to the enclosures and to the terms, conditions, limitations, and requirements specified in this permit.

Notice must be filed on the enclosed form once the diversion works have been completed. Failure to complete the diversion works within the time allowed, or within any authorized extension of time thereof, will result in dismissal of this permit. If you need an extension of time, you must request it before the deadline for completion set forth in the permit. Any request for an extension of time must be accompanied by the statutorily required fee, which is currently \$100.00.

An acceptable water flowmeter must be installed on the diversion works authorized by this permit prior to using water. An annual water use report must be filed with the Chief Engineer by March 1, following the end of each calendar year. If a complete annual water use report is not received by the deadline, then a fine may be assessed, and all water use under such permit or right may be suspended. Reports submitted in paper form will be assessed a \$20 per file number paper filing fee. In order to avoid this filing fee, you may submit your report online at www.kswaterusereport.org.

The approval of your application constitutes a permit to appropriate water. It does not give authority to construct any dam or other stream obstruction regulated by K.S.A. 82a-301 through 305a. It does not give authority to access any right-of-way or authorize trespassing upon or injury to public or private property. It may also be necessary for you to comply with other local, state or federal requirements.

Enclosed is an informational sheet that sets forth the procedure to obtain a Certificate of Appropriation which will establish the extent of your perfected water right. Additional information and applicable forms may be found on our website at agriculture.ks.gov/divisions-programs/dwr. If you have any questions or need assistance with any of these requirements, please contact our office at 785-564-6640 or your local Topeka Field Office at 785-296-5733. If you call, please reference the file number so we can help you more efficiently.

Sincerely,

Kristen A. Baum
New Application and Changes Supervisor
Division of Water Resources

KAB:bmm
Enclosure(s)
pc: Topeka Field Office

RIGHT TO A HEARING AND TO ADMINISTRATIVE REVIEW

If you are aggrieved by this Order, then pursuant to K.S.A. 82a-1901, you may:

- 1) request an evidentiary hearing before the Chief Engineer, or
- 2) request administrative review by the Secretary of Agriculture.

Failure to request an evidentiary hearing before the Chief Engineer does not preclude your right to administrative review by the Secretary.

To obtain an evidentiary hearing before the Chief Engineer, a written request for hearing must be filed within 15 days after service of this Order as provided in K.S.A. 77-531 (**i.e., within a total of 18 days after this Order was mailed to you**), with: Kansas Department of Agriculture, Attn: Legal Section, 1320 Research Park Drive, Manhattan, Kansas 66502, FAX (785) 564-6777.

If you do not file a request for an evidentiary hearing before the Chief Engineer, you may petition for administrative review of the Order by the Secretary of Agriculture. A petition for review shall be in writing and state the basis for requesting administrative review. The request for hearing may be denied if the request fails to clearly establish factual or legal issues for review. See K.S.A. 77-527. The petition must be filed within 30 days after service of this Order as provided in K.S.A. 77-531 (**i.e., within a total of 33 days after this Order was mailed to you**), and be filed with: Secretary of Agriculture, Attn: Legal Division, Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, Kansas 66502, FAX (785) 564-6777.

If neither a request for an evidentiary hearing nor a petition for administrative review is filed as set forth above, then this Order shall be effective and become a final agency action as defined in K.S.A. 77-607(b). Failure to timely request either an evidentiary hearing or administrative review may preclude further judicial review under the Kansas Judicial Review Act.

CERTIFICATE OF SERVICE

On this 18 day of November, 2021, I hereby certify that the foregoing Approval of Application and Permit to Proceed, File No. 50,576, dated 8 November was mailed postage prepaid, first class, US mail to the following:

CITY OF VERMILLION
102 MAIN ST
VERMILLION, KS 66544

With photocopies to:

Topeka Field Office



Division of Water Resources