

File No. **50,986** 13. County: **JW-Jewell** Basin: **27 - Republican River** Stream:
 Structures File No: Aquifer Code: **144 Meade/Grand Island Formation** Special Use Area:

14. Points of Diversion, Rates & Quantities										MOD Q	AF	Rate gpm		Storage Qty		Storage Rate	
PDIV	Qualifier	S	T	R	ID	'N	'W	Comment (AKA Line)		Auth	Add	Auth	Add	Auth	Add	Auth/Add	Overlaps
CHK	90151	NW SW NW	24	1S	7W	1	3645	4975	GEO CTR BATT ID 2340	110	110	800	800				
CHK	90152	NW SW NW	24	1S	7W	2	3880	5120	BAT 1 OF 4 WELLS								
CHK	90153	NW SW NW	24	1S	7W	3	3710	5010	BAT 2 OF 4 WELLS								
CHK	90154	NW SW NW	24	1S	7W	4	3550	4920	BAT 3 OF 4 WELLS								
CHK	90155	NW SW NW	24	1S	7W	5	3440	4850	BAT 4 OF 4 WELLS								

15. Limitations Type: Quantity: Rate: combined with file no(s):
 Type: Quantity: Rate: combined with file no(s):

16. Metering Metering Required Anti-Reverse Required Seal Required Compliance Date: **12/31/2025**

17. Place of Use		NE¼				NW¼				SW¼				SE¼				Total	Owner(s)	Chg?	Overlaps
PDIV	S T R ID	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE				
CHK	71274 24 1S 7W 1							32.5	32.5	32.5	32.5							130	5a	<input type="checkbox"/>	
																				<input type="checkbox"/>	
																				<input type="checkbox"/>	
																				<input type="checkbox"/>	
																				<input type="checkbox"/>	
																				<input type="checkbox"/>	

18. Point of Diversion and Place of Use Overlaps

*	**
+	++
#	##
^	^^

MEMORANDUM TO FILE

Division of Water Resources, Water Appropriation Program

Date: July 11, 2024

From: Christa Anhold , Environmental Scientist

Re: New Application File No. 50,986 – Cindy Hedstrom

Summary

Cindy Hedstrom filed the above referenced application proposing to appropriate 156 acre-feet of groundwater per year at a rate of 800 gallons per minute from a battery of four (4) wells to irrigate 130 acres in Jewell County. After the application failed safe yield, the applicant agreed to reduce the quantity from 156 AF to 110 AF. There are no overlapping files. The applicant owns the place of use and points of diversion. The proposed point of diversion is within the Republican River Basin which has regulations for wells that utilize groundwater from the “effective alluvium”, the Mead/Grand Island Formation is not considered part of the “effective alluvium” therefor special regulations for the Republican River Basin do not apply to this application.

Reasonable Rate and Quantity

The requested 110 acre-feet of groundwater applied to 130 acres is less than the 1.3 acre-feet per acre reasonable quantity for Jewell County and as such can be considered reasonable. A rate of 800 gallons per minute is the maximum reasonable rate for a battery of wells per K.A.R. 5-1-1(n).

Source of Supply and Safe Yield

Two test hole logs were provided with the application. The first test log indicates top soil from surface to 3 feet, tan clay from 3 to 100 feet with sandstone from 5 to 55 and 60 to 65 feet, sandstone, fine sand and gritty clay from 100 to 118 feet, small to medium gravel and fine to coarse sand from 118 to 140 feet, coarse sand alternating with gray clay-fine gravel from 140 to 180 feet, gray clay with limestone from 180 to 190 feet, fine to medium sand from 190 to 193 feet, and shale from 193 feet to 200 feet below ground surface. Static water level was measured at 128 feet below ground surface, the initial depth water was encountered is not reported.

The second test log indicates top soil from surface to 10 feet, tan clay from 10 to 80 feet with sandstone from 58 to 62 feet, sandstone from 80 to 100 feet, fine sand from 100 to 115 feet, gray clay with fine to medium sand from 115 to 150 feet, sand and gravels from 150 to 163 feet, gravel and clay from 163 to 168 feet, limestone with clay from 168 to 175 feet, sand from 175 to 185 and shale from 185 to 190 feet. Water level below ground surface was not included in the log.

Jewell county is underlain by the Dakota formation, the confined Dakota Aquifer. However, based on the provided well logs, those found in the surrounding area in WWC5, “Geology and Ground-water Resources of Jewell County, Kansas” KGS Bulletin 115 (1955) it is estimated that the source of supply is the Mead/Grand Island Formation. Which is consistent with surround water rights.

A safe yield report indicates the source of supply covers 8,042 acres. Based on potential recharge of 2.2 inches, with 75% available for appropriating, safe yield was determined to be 1,105.84 acre-feet. Existing appropriations total 995.8 acre-feet, leaving 110.04 acre-feet available. The available 110.04 acre-feet of water was not sufficient to meet the applicants initial request of 156 acre-feet. During a phone call with the applicant on July 11, 2024, they agreed to reduce their quantity to 110 AF to meet safe yield requirements.

Nearby Water Rights

From the proposed geographic center of wells the closest non-domestic well is 7,420 feet away, and the closest domestic well is 5,700 feet away. Well spacing regulations have been met. No nearby neighbors were provided by the applicant. No potential groundwater users in a half mile radius were observed while processing this application. No nearby letters were mailed.

Recommendations

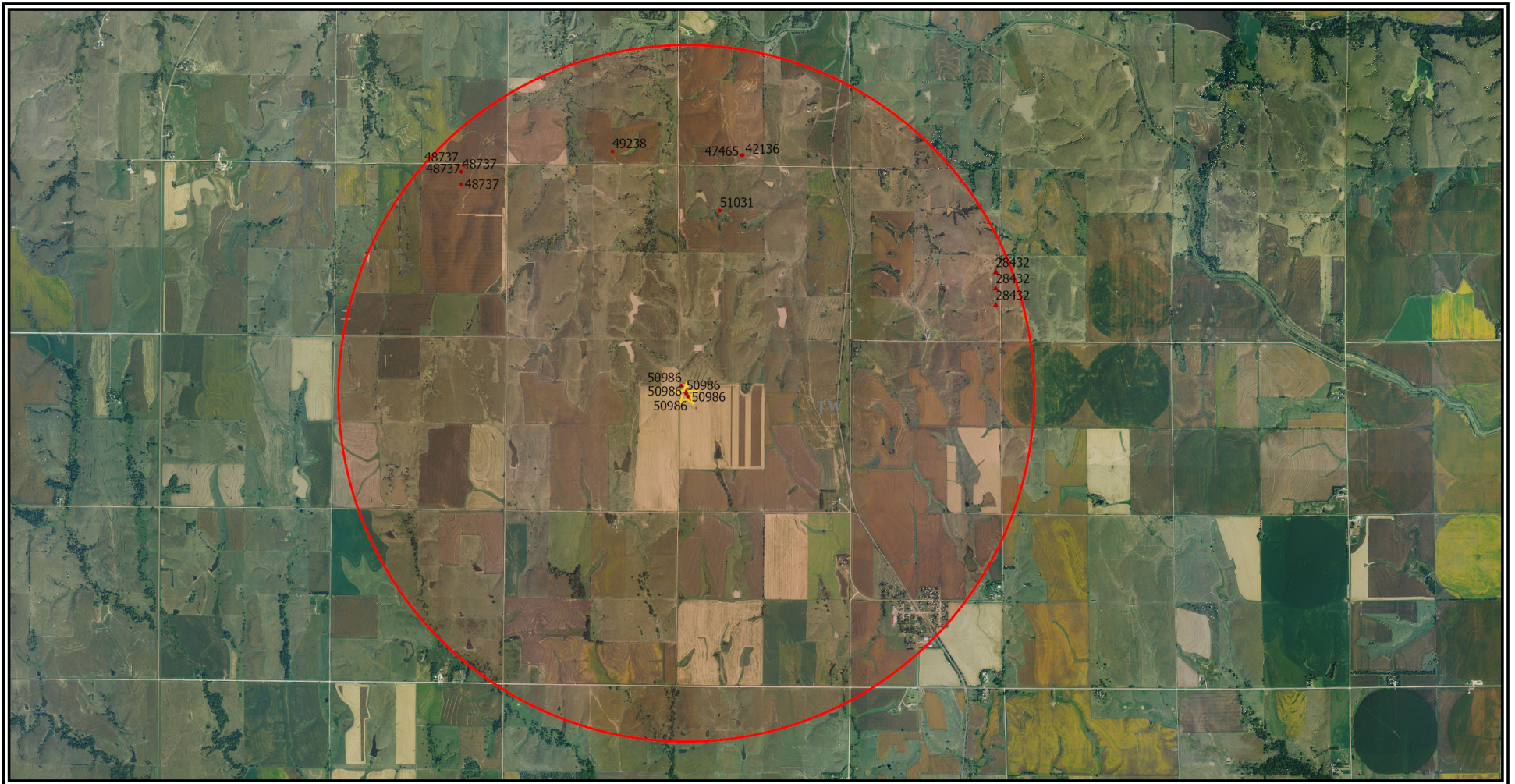
The application was sent for consideration to Kelly Stewart, Water Commissioner of the Stockton Field Office on July 11, 2024, and recommended for approval in an e-mail dated July 12, 2024.

The application complies with all regulations concerning reasonable quantity, safe yield, and minimum spacing requirements. It does not appear that approval of the application will impair senior water rights nor prejudicially or unreasonably affect the public interest. Therefore, it is recommended that the referenced application be approved.



Christa Anhold
Environmental Scientist
Manhattan Headquarters

Safe Yield Report Sheet
Water Right- Proposed Point of Diversion
Point of Diversion in 24-01S-07W
Footages from SE corner- 3,645 feet North 4,975 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 1,105.84 AF.

Total prior appropriations in the circle is 1,359.84 AF. ~~-364~~ = 995.8

Total quantity of water available for appropriation is ~~0.00 AF~~. $1105.84 - 995.8 = 110.04$ 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 2.2 inches.

The percent of recharge available for appropriation is 75%.

Authorized Quantity values are as of 04-JUN-2024 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 7 water rights and 15 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 28432 00	MUN	NK	G	SE	NE	SE		1666	121	18	01	06W	2	PD	175.97	175.97		
Same	MUN	NK	G	NE	SE	SE		1163	121	18	01	06W	3	PD	161.95	161.95		
Same	MUN	NK	G	NE	NE	SE		2161	123	18	01	06W	1	PD	164.92	164.92		
A 42136 00	IRR	NK	G	SW	SE	SW		300	3340	12	01	07W	4	WR	150.00	150.00	210.00	210.00
A 47465 00	IRR	MM	G	SW	SE	SW		300	3340	12	01	07W	4	WR	100.00	100.00	210.00	0.00
A 48737 00	IRR	NK	G	NE	NW	NE		5038	1348	15	01	07W	1	WR	80.00	80.00	190.00	190.00
Same	IRR	NK	G	NE	NW	NE		4652	1341	15	01	07W	2	WR				
Same	IRR	NK	G	NE	NW	NE		5234	1430	15	01	07W	3	WR				
Same	IRR	NK	G	NE	NW	NE		5227	1273	15	01	07W	4	WR				
A 49238 00	IRR	LR	G	SE	SW	SE		413	1983	11	01	07W	1	WR	163.00	163.00	125.00	125.00
A 50986 00	IRR	AY	G	NW	SW	NW		3645	4975	24	01	07W	1	WR	156.00	156.00	-156	130.00
Same	IRR	AY	G	NW	SW	NW		3880	5120	24	01	07W	2	WR				
Same	IRR	AY	G	NW	SW	NW		3710	5010	24	01	07W	3	WR				
Same	IRR	AY	G	NW	SW	NW		3550	4920	24	01	07W	4	WR				
Same	IRR	AY	G	NW	SW	NW		3440	4850	24	01	07W	5	WR				
A 51031 00	IRR	AY	G			NW		3960	3960	13	01	07W	1	WR	208.00	208.00	-208	160.00

Limitations

File Number	Seq Num	Limitations
A 28432 00	2	163.85MGY @650GPM COM/W JW 005

From: Anhold, Christa [KDA]
Sent: Fri 7/12/2024 8:46 AM
To: Stewart, Kelly [KDA]
Cc: Hageman, Nancy [KDA]
Subject: RE: 50,986 recommendation request

That is a mistake in the memo that I will correct. The domestic well is 5,700 feet away. I must have been measuring in meters. Thank you for catching that.

Christa Anhold
(785)564-6644

From: Stewart, Kelly [KDA] <Kelly.Stewart@ks.gov>
Sent: Friday, July 12, 2024 8:40 AM
To: Anhold, Christa [KDA] <Christa.Anhold@ks.gov>
Cc: Hageman, Nancy [KDA] <Nancy.Hageman@ks.gov>
Subject: RE: 50,986 recommendation request

Christa,

I have no objection to the approval of this application.

You state below there were no nearby neighbors to notify. However, your memo states there is a domestic about 1,700' away. Shouldn't they be notified or is a mistake in the memo?

Thanks,

Kelly

From: Anhold, Christa [KDA] <Christa.Anhold@ks.gov>
Sent: Thursday, July 11, 2024 3:07 PM
To: Stewart, Kelly [KDA] <Kelly.Stewart@ks.gov>
Subject: 50,986 recommendation request

Good afternoon Kelly,

Attached is a draft memo for 50,986 for your review and recommendation. There were no nearby neighbors to notify.

Let me know if you need anything else.

Christa Anhold
Environmental Scientist
Department of Water Resources
(785)-564-6644
Christa.anhold@ks.gov

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. 50,986** of the applicant

**CINDY HEDSTROM
1526 20 ROAD
COURTLAND, KS 66939**

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 **March 2, 2023**.
2. That the water sought to be appropriated shall be used for irrigation use on land described in the application, as follows:

Sec. Twp. Range	NE¼				NW¼				SW¼				SE¼				TOTAL
	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
24 - 1S - 7W							32.5	32.5	32.5	32.5							130.0

3. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of a battery of four (4) wells with a geographical center located in the Northwest Quarter of the Southwest Quarter of the Northwest Quarter (NW¼ SW¼ NW¼) of Section 24, more particularly described as being near a point 3,645 feet North and 4,975 feet West of the Southeast corner of said section, in Township 1 South, Range 7 West, Jewell County, Kansas, located substantially as shown on the topographic map accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of **800 gallons per minute (1.78 c.f.s.)** and to a quantity not to exceed **110 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, 2025**, 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, 2029**, 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 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 all wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this permit shall have a tube or other device installed in a manner acceptable to, and in accordance with specifications adopted by, the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.

13. That an acceptable water flow meter shall be installed and maintained on the diversion works authorized by this permit in accordance with Kansas Administrative Regulations 5-1-4 through 5-1-12 adopted by the Chief Engineer. The required 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).

14. 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.

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

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 this permit is further limited such that all four (4) wells shall be located within a three hundred (300) foot radius circle, in the same local source of supply, shall be limited to a total maximum diversion rate not in excess of **800 gallons per minute (1.78 c.f.s.)** and shall supply water to a common distribution system.

18. 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.

Ordered this *16th* day of *July*, 2024, 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 *16th* day of *July*, 2024, by Lane P. Letourneau, P.G., Water Appropriation Program Manager, Division of Water Resources, Kansas Department of Agriculture.

Vickie L. Belanger

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

July 23, 2024

CINDY HEDSTROM
1526 20 ROAD
COURTLAND KS 66939

RE: Appropriation of Water
File No. 50,986

Dear Ms. Hedstrom:

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 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.

Also included 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/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 Stockton Field Office at (785)-425-6787. If you call, please reference the file number so we can help you more efficiently.

Sincerely,

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

KAB:kak:cla
Enclosure(s)
pc: Stockton 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 request an evidentiary hearing before the Chief Engineer or 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 Division, 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 review 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 23 day of July, 2024, I hereby certify that the foregoing Approval of Application and Permit to Proceed, File No. 50,986, dated July 18, 2024, was mailed postage prepaid, first class, US mail to the following:

Original to:

CINDY HEDSTROM
1526 20 ROAD
COURTLAND KS 66939

With photocopies to:

KDA-DWR Stockton Field Office



Division of Water Resources