

MEMORANDUM TO FILE

Division of Water Resources, Water Appropriation Program

Date: June 7, 2024

From: Christa Anhold , Environmental Scientist

Re: New Application File No. 51,013 – Nelson Wiebe

Summary

Nelson Wiebe filed the above reference application proposing to appropriate 1,825,000 gallons (5.6 acre-feet) per year of groundwater at a diversion rate of 20 gallons per minute from two (2) wells to raise 20,000 hens (industrial use) in McPherson County. This application falls under K.A.R. 5-3-4(d)(1), for two (2) wells within one-quarter mile, that source the same supply and do not exceed a maximum diversion rate of 20 gallons per minute per well. The applicant owns both the place of use and point of diversion. There are no overlapping water right files.

Reasonable Rate and Quantity

The applicant proposes to appropriate 1,825,000 gallons of groundwater per year to raise 20,000 hens. Water will be used for drinking water year-round and cooling cells for animal housing 6 months of the year.

	No. Hens	Water Use Per 100 Hen (gal/day)	Drinking (gal/day)	Cooling Cells (gal/day)	Per Day (gal)	Per Year (gal)
Assuming Maximum Use	20,000	5	1,000	4,000	5,000	1,825,000
K.A.R. 5-3-22(a)	20,000	9	1,800	40,000	41,800	15,257,000

Per K.A.R. 5-3-22 a maximum reasonable quantity of water for 100 laying hens requires 9 gallons of drinking water per day and 200 gallons per day of water to maintain living conditions. For 22,000 hens, per K.A.R. 5-3-22, a maximum reasonable quantity would be 15,257,00 gallons per year (46.85 acre-feet). Based on research discussed in the below paragraph, we feel comfortable allowing the applicant to use less than what is recommended in K.A.R 5-3-22.

In an email dated April 23, 2024, the applicant stated he has 2 cooling pumps that are rated for 3.7 gallons per minute each. He estimates they run 50% of the time depending on how hot it is, and maximum use would be 222 gallons per hour (2,664 gallons per day) and in rare extreme heat 4,000 gallons per day. Research available online from Alabama A&M & Auburn extension found that a hen house with 44,000 hens (twice what the applicant intends) consumed a maximum of 6,352 gallons of water for cooling per day and 4,076 gallons for drinking per day, totaling 10,428 gallons per day for 44,000 hens. Based on this and other online sources the requested 1,825,00 gallons per year (5,000 gallons per day) can be considered reasonable. A pumping rate of 20 gallons per minute seems reasonable for the area and for needs of the hens.

Source of Supply and Safe Yield

The well log for the northern well was provided with the application and indicates fine sand from 3 feet to 32 feet, clay from 32 feet to 48 feet, blue and red shale from 48 feet to 80 feet. Static water level was measured at 25 feet below ground surface in the sand. Additionally, the log indicated a foot of water encountered from 70 to 71 feet below ground surface, which is likely part of the Kiowa Formation. It is estimated that this well is likely pulling water from the sand formation and not the deeper shale. Based on the well logs provided, nearby well logs and "Geology and Ground-water Resources of a Part of South-central Kansas with special reference to the Wichita municipal water supply" KGS Bulletin 79 the source of supply is likely Tertiary Delmore Formation. There

is a chance the shale from 48 to 80 feet is part of the Kiowa Formation and the Dakota aquifer could be supplying the 70-to-71-foot area of water. However, since the applicant requests only 5.6 acre-feet at 20 gallons per minute there is a slim chance they would draw water from the Dakota Aquifer. Therefore the application has been reviewed assuming Tertiary Delmore Formation.

A safe yield report for the northern well indicates the source of supply covers 8,042-acres. Based on potential recharge of 2.8 inches, with 100% available for appropriation safe yield was determined to be 1,876.58 acre-feet. There are no existing water appropriations in the 2-mile safe yield circle, leaving 1,876.58 acre-feet available to raise 20,000 hens with the 5.6 acre-feet of water requested by the applicant.

A well log for the southern well was found on WWC5 and indicates fine sand with small clay streaks from 1 foot to 55 feet, and a hard gray slightly weathered shale from 55 feet to 60 feet below ground surface. Static water level was measured at 15 feet below ground surface. The driller estimated a yield of 14 gallons per minute. Based on the well logs provided, nearby well logs and “Geology and Ground-water Resources of a Part of South-central Kansas with special reference to the Wichita municipal water supply” KGS Bulletin 79 the source of supply is likely Tertiary Delmore Formation.

A safe yield report for the southern well indicates the source of supply covers 8,042-acres. Based on potential recharge of 2.8 inches, with 100% available for appropriation, safe yield was determined to be 1,876.58 acre-feet. There are no existing water appropriations in the 2-mile safe yield circle, leaving 1,876.58 acre-feet available to raise 20,000 hens with the 5.6 acre-feet of water requested by the applicant.

Nearby Water Rights

From the northern well the closest domestic well is 2,800 feet away and the closest non-domestic well is over 5 miles away. From the southern well the closest domestic well is 2,230 feet away and the closest nondomestic well is over 5 miles away. Well spacing regulations per K.A.R. 5-4-4 have been met. The applicant provided names and addresses of nearby well owners. Nearby notifications were mailed on May 17, 2024. A nearby called with questions about the application, but no written comments were received.

Recommendations

The application was sent for consideration to Kelly Stewart, Water Commissioner of the Stockton Field Office on June 7, 2024, and recommended for approval on June 7, 2024.

The application complies with all regulations concerning reasonable quantity, safe yield, and minimum spacing requirements. The proposed application is subject to minimum desirable streamflow requirements. The applicant signed, notarized, and returned the required form to our office. Approval of the application will not 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
Water Appropriation Program

WATER WELL RECORD (WWC-5)

KOLAR DOC ID _____ WELL ID _____
 Original Record Correction Change in Well Use

LOCATION OF WATER WELL

Latitude		Longitude		Section		Township		Range		E W	Fraction		¼		¼		¼
Datum		Elevation		County													

WATER WELL OWNER

Name	
Business	
Address	
Well location at owner's address	

WELL WATER USE

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COMPLETION

Depth of completed well: _____ ft.
Depth(s) groundwater encountered: (1) _____ ft.; (2) _____ ft.; (3) _____ ft.; (4) dry well
Static water level in well: _____ ft. measured below land surface on (mm/dd/yy): _____ measured above land surface on (mm/dd/yy): _____
Estimated yield: _____ gpm
Water level was: _____ ft. after _____ hours pumping _____ gpm
Pump installed? Yes No
Water well disinfected? Yes No
Date disinfected (mm/dd/yy): _____
Aquifer, if known:

NEAREST SOURCE OF POTENTIAL CONTAMINATION

Source: _____
Distance from well: _____ Direction from well: _____
Source description: _____
Source: _____
Distance from well: _____ Direction from well: _____
Source description: _____
No potential source of contamination within 100 feet.

CONSTRUCTION

Borehole interval: from _____ to _____ ft.	Borehole diameter: _____ in.
from _____ to _____ ft.	_____ in.
Casing height above land surface: _____ in.	
If casing height is less than 12 in. has a variance been approved?* Yes No	
*variance not required for monitoring or environmental remediation wells	
Casing type: _____	
Blank casing interval: _____ ft. to _____ ft.	
Blank casing diameter: _____ in.	
Casing joints: _____	
Weight: _____ lbs/ft.	
Wall thickness or gauge no.: _____	
Blank casing interval: _____ ft. to _____ ft.	
Blank casing diameter: _____ in.	
Casing joints: _____	
Weight: _____ lbs/ft.	
Wall thickness or gauge no.: _____	
Grout interval: _____ ft. to _____ ft.	
Grout material: _____	
Grout interval: _____ ft. to _____ ft.	
Grout material: _____	
Screen / perforation material: _____	
Screen / perforation openings: _____	
Screen / perforation intervals: From _____ ft. to _____ ft.	
Slot size _____ unit _____	
From _____ ft. to _____ ft.	
Slot size _____ unit _____	
Gravel pack intervals: Gravel pack not used: Gravel size _____ in	
From _____ ft. to _____ ft.	
Gravel pack not used: Gravel size _____ in	
From _____ ft. to _____ ft.	

PERMIT & ID NUMBERS (AS REQUIRED)

DWR Application No.: _____
KDHE / EPA Project Code: _____
Site Name: _____
KDHE UIC Class V Form Completed: Yes No
County Permit: Yes No Permit ID: _____
Lease Name & Well #: _____
of boreholes: _____ # of dewatering wells: _____

LITHOLOGIC LOG

FROM	TO	LITHOLOGY INTERVALS

COMMENTS

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CONTRACTOR'S OR LANDOWNERS CERTIFICATION

This water well was constructed reconstructed pursuant to the stated water well contractor's license and was completed on _____. I certify that this record is true to the best of my knowledge and belief. This water well record was completed on _____ under the business name of _____, Kansas Water Well Contractor's License No. _____ under the authority of the designated person as defined in K.A.R. 28-30-2(j) and signed and certified by the electronic signature of the designated person at its submittal: _____.

Send one copy to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well.

From: Stewart, Kelly [KDA]
Sent: Fri 6/7/2024 4:15 PM
To: Anhold, Christa [KDA]
Cc: Hageman, Nancy [KDA]
Subject: RE: 51013 Recommendation Request

Christa,

I recommend approval of this application.

Kelly

From: Anhold, Christa [KDA] <Christa.Anhold@ks.gov>
Sent: Friday, June 7, 2024 11:36 AM
To: Stewart, Kelly [KDA] <Kelly.Stewart@ks.gov>
Subject: 51013 Recommendation Request

Kelly,

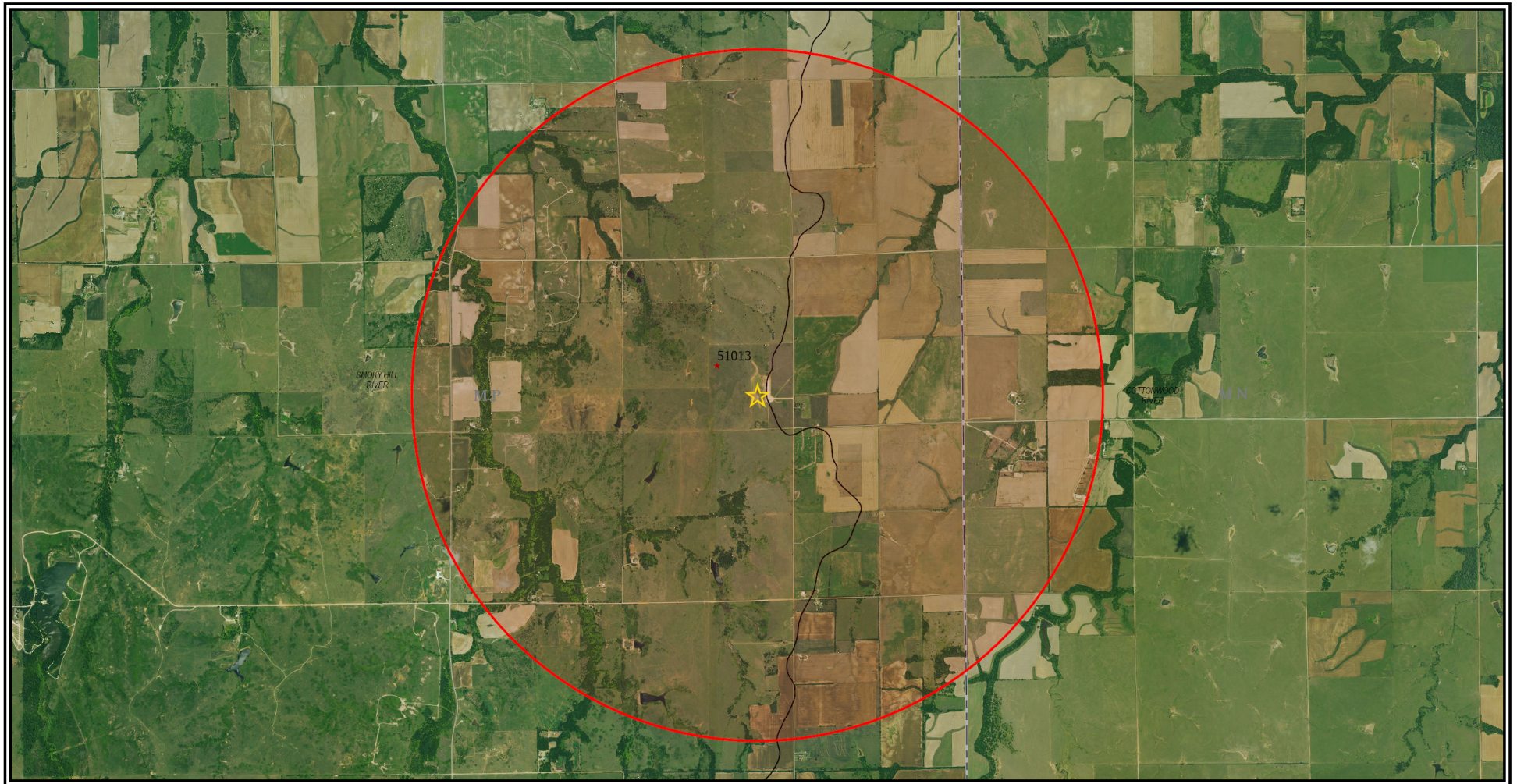
Attached is a draft memo for 51,013 for your review and recommendation. Nearby notifications were mailed on May 17, 2024. One neighbor called with some questions about the application but did not submit anything in writing. No other comments were received.

Let me know if you need anything else.

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

Safe Yield Report Sheet
Water Right- Proposed Point of Diversion
Point of Diversion in 11-18S-01W

Footages from SE corner- 1,000 feet North 1,081 feet West (NORTH WELL)



Analysis Results

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

The safe yield based on the variables listed below is 1,876.58 AF.

Total prior appropriations in the circle is 6.00 AF. -6 = 0AF

Total quantity of water available for appropriation is 1,870.58 AF. +6AF = 1.876.58

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 2.8 inches.

The percent of recharge available for appropriation is 100%.

Authorized Quantity values are as of 07-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 is 1 water right and 1 point of diversion within the circle.

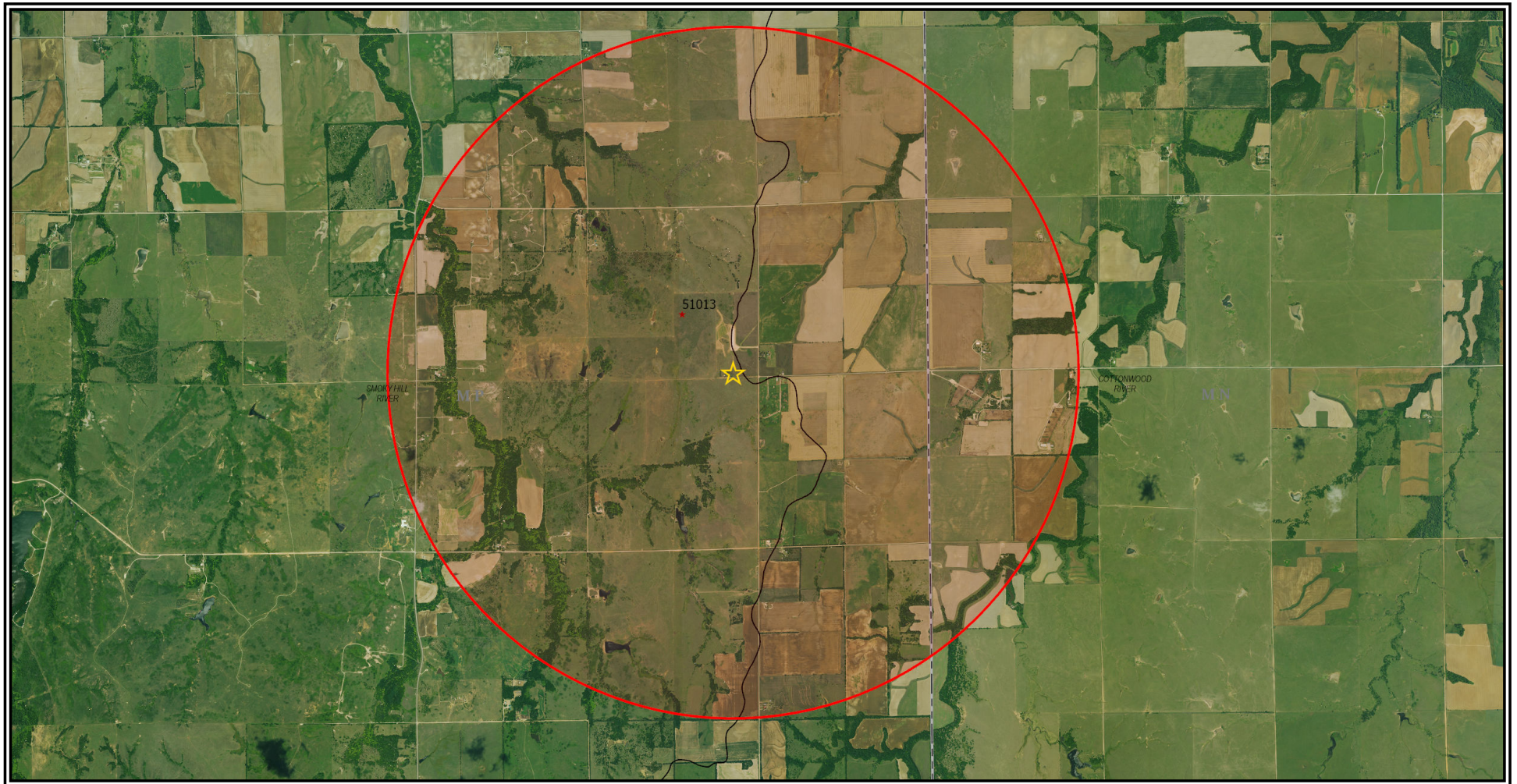
File Number	Use	ST	SR	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Qind	Auth Quant	Add Quant	Tot Acres	Net Acres
A 51013 00	IND	AY	G				SE	1920	2310	11	18	01W	1	WR	6.00	6.00		-6.0

Safe Yield Report Sheet

Water Right- Proposed Point of Diversion

Point of Diversion in 11-18S-01W

Footages from SE corner- 112 feet North 762 feet West (SOUTH WELL)



Analysis Results

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

The safe yield based on the variables listed below is 1,876.58 AF.

Total prior appropriations in the circle is 6.00 AF. -6.0 = 0AF

Total quantity of water available for appropriation is 1,870.58 AF. +6.0 = 1876.58

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 2.8 inches.

The percent of recharge available for appropriation is 100%.

Authorized Quantity values are as of 07-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 is 1 water right and 1 point 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 51013 00	IND	AY	G				SE	1920	2310	11	18	01W	1	WR	6.00	6.00		-6.0

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. 51,013** of the applicant

**NELSON WIEBE
722 ABILENE
DURHAM, KS 67438**

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 **April 17, 2023**.
2. That the water sought to be appropriated shall be used for industrial use in the East Half of the Southeast Quarter (E $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 11, Township 18 South, Range 1 West, McPherson County, Kansas.
3. That the appropriation sought shall be limited to a maximum quantity not to exceed **1,825,000 gallons of water (5.6 acre-feet)** for any calendar year.
4. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of wells at the following locations:

one (1) well located in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 11, more particularly described as being near a point 1,000 feet North and 1,081 feet West of the Southeast corner of said section, limited to a maximum rate of diversion not to exceed **20 gallons per minute (0.045 c.f.s.)**, and

one (1) well located in the Southwest Quarter of the Southeast Quarter of the Southeast Quarter (SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$), of Section 11, more particularly described as being near a point 112 feet North and 762 feet West of the Southeast corner of said section, limited to a maximum rate of diversion not to exceed **20 gallons per minute (0.045 c.f.s.)**,

both in Township 18 South, Range 1 West, McPherson County, Kansas, located substantially as shown on the topographic map accompanying the application.

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 acceptable water flow meters 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. These water flow meters 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 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.

16. That this permit is further limited such that both wells shall be located within a one-quarter mile (1,320 feet) radius circle, in the same local source of supply, with a maximum diversion rate of 20 gallons per minute per well.

17. That failure without cause to comply with the provisions of this 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 11 day of June, 2024, in Manhattan, Riley County, Kansas.

Lane P. Letourneau

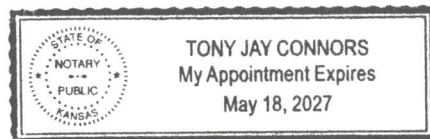
Lane P. Letourneau, P.G.
Water Appropriation Program Manager
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 11 day of June, 2024, by Lane P. Letourneau, P.G., Water Appropriation Manager, Division of Water Resources, Kansas Department of Agriculture.

Tony Jay Connors

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

June 12, 2024

NELSON WIEBE
722 ABILENE
DURHAM KS 67438

RE: Appropriation of Water
File No. 51,013

Dear Mr. Wiebe,

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, with specific reference to Paragraphs Nos. 3, 4 and 17.

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 12 day of June, 2024, I hereby certify that the foregoing Approval of Application and Permit to Proceed, File No. 51,013, dated June 11, 2024, was mailed postage prepaid, first class, US mail to the following:

Original to:

NELSON WIEBE
722 ABILENE
DURHAM, KS 67438

With photocopies to:

KDA-DWR Stockton Field Office



Division of Water Resources