

THE STATE OF KANSAS



APPLICATION COMPLETE
12/12/16
Reviewer MJM

KANSAS DEPARTMENT OF AGRICULTURE
Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

File Number 49741
This item to be completed by the Division of Water Resources.

WATER RESOURCES RECEIVED

APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

Filing Fee Must Accompany the Application
(Please refer to Fee Schedule attached to this application form.)

DEC 12 2016
12:58
KS DEPT OF AGRICULTURE

* To the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, KS 66502:

1. Name of Applicant (Please Print): CORNEJO MATERIALS
Address: PO BOX 16204
City: WICHITA State: KS Zip Code: 67216
Telephone Number: (316) 655-3139 (cell)

2. The source of water is: surface water in _____ (stream)
OR groundwater in ARKANSAS RIVER _____ (drainage basin)

Certain streams in Kansas have minimum target flows established by law or may be subject to administration when water is released from storage for use by water assurance district members. If your application is subject to these regulations on the date we receive your application, you will be sent the appropriate form to complete and return to the Division of Water Resources.

3. The maximum quantity of water desired is 427 acre-feet OR _____ gallons per calendar year, to be diverted at a maximum rate of NE gallons per minute OR _____ cubic feet per second.

Once your application has been assigned a priority, the requested maximum rate of diversion and maximum requested quantity of water under that priority number can **NOT** be increased. Please be certain your requested maximum rate of diversion and maximum quantity of water are appropriate and reasonable for your proposed project and are in agreement with the Division of Water Resources' requirements.

4. The water is intended to be appropriated for (Check use intended):
(a) Artificial Recharge (b) Irrigation (c) Recreational (d) Water Power
(e) Industrial (f) Municipal (g) Stockwatering (h) Sediment Control
(i) Domestic (j) Dewatering (k) Hydraulic Dredging (l) Fire Protection
(m) Thermal Exchange (n) Contamination Remediation

YOU **MUST** COMPLETE AND ATTACH ADDITIONAL DIVISION OF WATER RESOURCES FORM(S) PROVIDING INFORMATION TO SUBSTANTIATE YOUR REQUEST FOR THE AMOUNT OF WATER FOR THE INTENDED USE REFERENCED ABOVE.

For Office Use Only:
F.O. 2 GMD 0 Meets K.A.R. 5-3-1 (YES/NO) Use DND Source G/S County CL By AW Date 12/12/16
Code REG 2B3 Fee \$500* TR # _____ Receipt Date 12/12/16 Check # _____

*SAND & GRAVEL PROJECT PERMIT

12/14/2016 CLM

5. The location of the proposed wells, pump sites or other works for diversion of water is:

Note: For the application to be accepted, the point of diversion location must be described to at least a 10 acre tract, unless you specifically request a 60 day period of time in which to locate the site within a specifically described, minimal legal quarter section of land.

(A) One in the _____ quarter of the **Near Center** of the **SE** quarter of Section 31, more particularly described as being near a point 1,320 feet North and 1,320 feet West of the Southeast corner of said section, in Township 31 South, Range 3 EAST, COWLEY County, Kansas.

(B) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

(C) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

(D) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that a single application may include up to four wells within a circle with a quarter (1/4) mile radius in the same local source of supply which do not exceed a maximum diversion rate of 20 gallons per minute per well.

A battery of wells is defined as two or more wells connected to a common pump by a manifold; or not more than four wells in the same local source of supply within a 300 foot radius circle which are being operated by pumps not to exceed a total maximum diversion rate of 800 gallons per minute and which supply water to a common distribution system.

6. The owner of the point of diversion, if other than the applicant is (please print):

Applicant + (under contract)
(name, address and telephone number)

(name, address and telephone number)

You must provide evidence of legal access to, or control of, the point of diversion from the landowner or the landowner's authorized representative. Provide a copy of a recorded deed, lease, easement or other document with this application. In lieu thereof, you may sign the following sworn statement:

I have legal access to, or control of, the point of diversion described in this application from the landowner or the landowner's authorized representative. I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 6, 2016. [Signature]
Applicant's Signature

7. The proposed project for diversion of water will consist of GROUNDWATER PIT
(number of wells, pumps or dams, etc.)

and (was)(will be) completed (by) FALL 2017
(Month/Day/Year - each was or will be completed)

8. The first actual application of water for the proposed beneficial use was or is estimated to be FALL 2017
(Mo/Day/Year)



9. Will pesticide, fertilizer, or other foreign substance be injected into the water pumped from the diversion works?

Yes No If "yes", a check valve shall be required.

All chemigation safety requirements must be met including a chemigation permit and reporting requirements.

10. If you are planning to impound water, please contact the Division of Water Resources for assistance, prior to submitting the application. Please attach a reservoir area capacity table and inform us of the total acres of surface drainage area above the reservoir.

Have you also made an application for a permit for construction of this dam and reservoir with the Division of Water Resources? Yes No

- If yes, show the Water Structures permit number here _____
- If no, explain here why a Water Structures permit is not required _____

11. The application must be supplemented by a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the following information. On the topographic map, aerial photograph, or plat, identify the center of the section, the section lines or the section corners and show the appropriate section, township and range numbers. Also, please show the following information:

(a) The location of the proposed point(s) of diversion (wells, stream-bank installations, dams, or other diversion works) should be plotted as described in Paragraph No. 5 of the application, showing the North-South distance and the East-West distance from a section line or southeast corner of section.

(b) If the application is for groundwater, please show the location of any existing water wells of any kind within 1/2 mile of the proposed well or wells. Identify each existing well as to its use and furnish the name and mailing address of the property owner or owners. If there are no wells within 1/2 mile, please advise us.

(c) If the application is for surface water, the names and addresses of the landowner(s) 1/2 mile downstream and 1/2 mile upstream from your property lines must be shown.

(d) The location of the proposed place of use should be shown by crosshatching on the topographic map, aerial photograph or plat.

(e) Show the location of the pipelines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use.

A 7.5 minute U.S.G.S. topographic map may be obtained by providing the section, township and range numbers to: Kansas Geological Survey, 1930 Constant, Campus West, University of Kansas, Lawrence, Kansas 66047.

12. List any application, appropriation of water, water right, or vested right file number that covers the same diversion points or any of the same place of use described in this application. Also list any other recent modifications made to existing permits or water rights in conjunction with the filing of this application.

Estimated exposed surface acres of groundwater at completion = 256 Acres.

256 Acres x 20" evaporation / 12 = 427 Acre-Feet

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13. Furnish the following well information if the proposed appropriation is for the use of groundwater. If the well has not been completed, give information obtained from test holes, if available.

Information below is from: Test holes Well as completed Drillers log attached

Well location as shown in paragraph

No.

(A)

(B)

(C)

(D)

Date Drilled

Total depth of well

Depth to water bearing formation

Depth to static water level

Depth to bottom of pump intake pipe

14. The relationship of the applicant to the proposed place where the water will be used is that of

owner

(owner, tenant, agent or otherwise)

15. The owner(s) of the property where the water is used, if other than the applicant, is (please print):

(name, address and telephone number)

(name, address and telephone number)

16. The undersigned states that the information set forth above is true to the best of his/her knowledge and that this application is submitted in good faith.

Dated at Wichita, Kansas, this 6th day of December, 2016.

(month)

(year)

(Applicant Signature)

APPLICANT(S) SOCIAL SECURITY
IDENTIFICATION NUMBER(S)

By [Signature]
(Agent or Office Signature)

and/or
APPLICANT(S) TAXPAYER I.D. NO.(S)

Steven P Hatfield
(Agent or Officer - Please Print)

Assisted by DWS

TOPEKA FO
(office/title)

Date: 12/6/2016

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FEE SCHEDULE

1. The fee for an application for a permit to appropriate water for beneficial use, except for domestic use, shall be (see paragraph No. 2 below if requesting storage):

ACRE-FEET	FEE
0-100	\$200.00
101-320	\$300.00
More than 320	\$300.00 plus \$20.00 for each additional 100 acre-feet or any part thereof.

2. The fee for an application in which storage is requested, except for domestic use, shall be:

ACRE-FEET	FEE
0-250	\$200.00
More than 250	\$200.00 plus \$20.00 for each additional 250 acre-feet of storage or any part thereof.

Note: If an application requests both direct use *and* storage, the fee charged shall be as determined under No. 1 or No. 2 above, whichever is greater, but not both fees.

3. The fee for an application for a permit to appropriate water for water power or dewatering purposes shall be \$100.00 plus \$200.00 for each 100 cubic feet per second, or part thereof, of the diversion rate requested.

Note: The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of \$400.00 when construction of the works for diversion has been completed, except that for applications filed on or after July 1, 2009, for works constructed for sediment control use and for evaporation from a groundwater pit for industrial use shall be accompanied by a field inspection fee of \$200.00.

MAKE CHECKS PAYABLE TO THE KANSAS DEPARTMENT OF AGRICULTURE

ATTENTION

A Water Conservation Plan may be required per K.S.A. 82a-733. A statement that your application for permit to appropriate water may be subject to the minimum desirable streamflow requirements per K.S.A. 82a-703a, b, and c may also be required from you. After the Division of Water Resources has had the opportunity to review your application, you will be notified whether or not you will need to submit a Water Conservation Plan. You also may be required to install a water flow meter or water stage measuring device on your diversion works prior to diverting water. There may be other special conditions or Groundwater Management District regulations that you will need to comply with if this application is approved.

CONVERSION FACTORS

1 acre-foot equals 325,851 gallons

1 million gallons equal 3.07 acre-feet

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WATER RESOURCES

TO: [Faint recipient name]
FROM: [Faint sender name]
SUBJECT: [Faint subject line]

WHEREAS [Faint text]
AND WHEREAS [Faint text]
IT IS THE POLICY OF THE STATE OF KANSAS [Faint text]

SECTION 1. [Faint text]
SECTION 2. [Faint text]
SECTION 3. [Faint text]

[Faint text on right side of page]

49,741

CORNEJO MATERIALS
SEC. 31, T31S, R3E & SEC. 6, T32S, R3E
COWLEY COUNTY



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Proposed Place of Use

All known wells within one-half mile of the proposed point of diversion are shown on this map.

1:24,000

- Nearby Point of Diversion
- Proposed Point of Diversion

KS DEPT OF AGRICULTURE

DEC 12 2008

[Handwritten signature]

SCANNED



**INDUSTRIAL USE
SUPPLEMENTAL SHEET**

File No. 49,741

Name of Applicant (Please Print): CORNEJO MATERIALS INC

1. Please describe type of industry or product produced: SAND & GRAVEL
 _____ Standard Industrial Classification Code Number: 9994

2. Please complete the following table to show your past and present water requirements:

PAST PRODUCT PRODUCTION AND WATER DIVERTED, IF APPLICABLE

LAST 5 YEARS	AMOUNT OF PRODUCT	WATER DIVERTED (GALLONS)	GALLONS PER PRODUCT PER DAY
5 years ago	NA		
Last year			
Present year			

3. Please complete the following table to show your future water requirements:

ESTIMATED FUTURE PRODUCT PRODUCTION AND WATER DIVERTED

NEXT 5 YEARS	AMOUNT OF PRODUCT	WATER TO BE DIVERTED (GALLONS)	GALLONS PER PRODUCT PER DAY
Year 1			
Year 2			
Year 3			
Year 4			
Year 5			

Number of days of operation of the industry per year is _____ days.

Please attach any tables, curves or additional information showing past, present and estimated future water requirements to substantiate the amount of water requested.

256 Acres of Exposed Groundwater x 20" evaporation / 12 = 427 Acre-Feet

4. Please designate the legal description of the location where the water is to be used. Show in the space provided below the Section (S), Township (T), and Range (R), and the number of acres in each forty acre tract or fractional portion thereof.

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE					
31	31	3E	SAND AND GRAVEL PIT IN THE SOUTH HALF OF NORTHEAST QUARTER & SOUTHEAST QUARTER																				
6	32	3E	SAND AND GRAVEL PIT IN THE NORTH HALF OF NORTHEAST QUARTER																				

You may attach any additional information you believe will assist in informing the Division of the need for your request.

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DEC 12 2016

1917

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WATER RESOURCES

KS DEPT OF AGRICULTURE

THE STATE



OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE

Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES

David W. Barfield, Chief Engineer

NOTICE OF INTENT TO OPEN OR EXPAND A SAND AND GRAVEL PIT OPERATION

(In accordance with K.S.A. 82s-734(c), K.A.R. 5-13-1, and amendments thereto)

File No. _____ (Office Use Only)

1. Operator Name (Please Print) CORNEJO MATERIALS INC.

Address 2060 E TULSA

WICHITA, KS 67216

Telephone (316) ~~522-4596~~ 655-3139

2. Please designate the legal description of the pit. 197.5 acres in the S $\frac{1}{2}$ of NE $\frac{1}{4}$ and the SE $\frac{1}{4}$ of Section 31, Township 31 South; and 58.5 acres in the N $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 6, Township 32 South; all in Range 3 East, Cowley County, Kansas.

3. Outline on an aerial photograph or topographical map the current and FINAL outline of the proposed pit, and attach it to the Notice of Intent. The photograph or map shall indicate the legal description of the location of the proposed pit and the scale of the map or photograph.

4. What year did, or will, the excavation of the pit begin? 2017.

5. Indicate the proposed final size of the pit in acres. 256 acres.

6. Estimate the year the pit will be completed? 2080

7. By what method will the pit be excavated?
Hydraulic X Mechanical _____ Other _____

8. Will you have any other diversions of water at the pit site besides hydraulic dredging, such as pumpsites or wells? Yes No _____. If yes, please specify the type of diversion and use to be made of the water. _____

9. Attach a copy of the Reclamation Plan you have on file with the State Conservation Commission.

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10. Please specify the measures you plan to use to protect groundwater from pollution, such as berms or vegetative strips. _____

11. Please complete the following table showing the estimated pit size at the end of each of the next five years.

Size of the Pit	Projected Pit Size in Acres
Current size of pit	0
Year 1	0
Year 2	0
Year 3	0
Year 4	0
Year 5	10

12. Owner's Name (Please Print) CORNEJO MATERIALS INC.

Address: 2060 E TULSA

WICHITA, KS 67216

Telephone (316) 522-4596

13. Please attach any additional information you believe will assist the Division in understanding the nature of your proposed pit or the expansion of your existing pit.

Steven P Hatfield 12/16/16
Name (Please Print) Date

[Signature]
Signature

Agent
Title/Relationship to Owner



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WATER RESOURCES

KS DEPT OF AGRICULTURE



1320 Research Park Drive
Manhattan, Kansas 66502
Jackie McClaskey, Secretary

Phone: (785) 564-6700
Fax: (785) 564-6777
Email: ksag@kda.ks.gov
www.agriculture.ks.gov
Sam Brownback, Governor

December 13, 2016

CORNEJO MATERIALS
PO BOX 16204
WICHITA KS 67216

FILE COPY

RE: Application
File No. 49741

Dear Sir or Madam:

Your application for permit to appropriate water in , was received and has been assigned the file number noted above.

As a matter of record, the Division of Water Resources has on hand a large number of applications awaiting processing. Therefore to be fair to all concerned, and so that we can process those applications on hand in the order they were received, we intend to concentrate on the backlog of applications until the issue is resolved. Once review of your application has begun, we will contact you, if additional information is required.

In accordance with the provisions of the Kansas Water Appropriation Act, a portion of which is included below, the use of water as proposed prior to approval of the application is unlawful. Once approved, compliance with the terms, conditions and limitations of the permit is necessary. Conservation of the water resources of Kansas is required.

Section 82a-728 of the Kansas Water Appropriation Act, provides (a) except for the appropriation of water for the purpose of domestic use, . . . it shall be unlawful for any person to appropriate or threaten to appropriate water from any source without first applying for and obtaining a permit to appropriate water in accordance with the provisions of the Water Appropriation Act or for any person to violate any condition of a vested right, appropriation right or an approved application for a permit to appropriate water for beneficial use.

(b) (1) The violation of any provision of this section by any person is a class C misdemeanor . . .

A class C misdemeanor is punishable by a fine not to exceed \$500 and/or a term of confinement not to exceed one month in the county jail. Each day that the violation occurs constitutes a separate offense.

If you have any questions, please contact me at (785) 564-6645. If you wish to discuss a specific file, please have the file number ready so that we may help you more efficiently.

Sincerely,

Brent A Turney, P.G.
Change Application Unit Supervisor
Water Appropriation Program

BAT: dlw
pc: STAFFORD Field Office
GMD

SCANNED

Water Rights and Points of Diversion Within 2.00 miles of point defined as:

1320 ft N and 1320 ft W of the SE Corner of Section 31, T 31S, R 3E

Located at: 97.137015 West Longitude and 37.307138 North Latitude

GROUNDWATER ONLY

#49741

meets spacing

File Number	Use	ST	SR	Dist	(ft)	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Batt	Auth_Quan	Add_Quan	Unit
A__ 41346	00	IND	MM	G	5675	--	NW	SW	SE	1000	2600	6	32	3E	2		44.01	44.01	AF
A__ 44661	00	IND	LO	G	3903	--	SE	SE	NW	2900	2800	6	32	3E	5		314.99	314.99	AF
A__ 44662	00	IND	KK	G	7752	--	SE	NW	NE	4100	1700	7	32	3E	5		116.99	116.99	AF
A__ 44663	00	IND	KK	G	7460	--	SE	NE	NW	4500	2750	7	32	3E	6		30.01	30.01	AF
A__ 48553	00	IRR	HK	G	3713	--	NE	SW	NW	3910	3980	31	31	3E	1		100.00	100.00	AF
A__ 49419	00	IND	GY	G	10541	--	NC	W2	SE	1320	1980	7	32	3E	7		133.30	133.30	AF
A__ 49457	00	IND	GY	G	2373	--	SW	NE	SW	1516	3685	31	31	3E	5		167.00	167.00	AF
A__ 49741	00	IND	AY	G	0	--	NC	SE		1320	1320	31	31	3E	6		427.00	427.00	AF

Total Net Quantities Authorized:	Direct	Storage
Total Requested Amount (AF) =	427.00	.00
Total Permitted Amount (AF) =	547.30	.00
Total Inspected Amount (AF) =	314.99	.00
Total Pro_Cert Amount (AF) =	44.01	.00
Total Certified Amount (AF) =	.00	.00
Total Vested Amount (AF) =	.00	.00
TOTAL AMOUNT (AF) =	1333.30	.00

An * after the source of supply indicates a pending application for change for the file number.
 An * after the ID indicates a 15 AF exemption was granted for the file number.
 A "G" in the Batt column indicates the GEO CTR of a battery. A "B" indicates a well in the battery.
 The number in the Batt column is the number of wells in the battery.

Water Rights and Points of Diversion Within 2.00 miles of point defined as:

97.137015 West Longitude and 37.307138 North Latitude

GROUNDWATER ONLY

WATER USE CORRESPONDENTS:

- File Number Use ST SR
- A__ 41346 00 IND MM G
- > CORNEJO & SONS INC
- > 2060 E TULSA
- > PO BOX 16204
- > WICHITA KS 67216
-
- A__ 44661 00 IND LO G
- > CORNEJO & SONS INC
- > 2060 E TULSA
- > PO BOX 16204
- > WICHITA KS 67216
-
- A__ 44662 00 IND KK G
- > CORNEJO & SONS INC
- > 2060 E TULSA
- > PO BOX 16204
- > WICHITA KS 67216
-

A__ 44663 00 IND KK G
> CORNEJO & SONS INC
> 2060 E TULSA
> PO BOX 16204
> WICHITA KS 67216

A__ 48553 00 IRR HK G
> CHARLES C & LOU ANN BUSS
>
> 1692 E 30TH AVE N
> OXFORD KS 67119

A__ 49419 00 IND GY G
> CORNEJO & SONS INC
> 2060 E TULSA
> PO BOX 16204
> WICHITA KS 67216

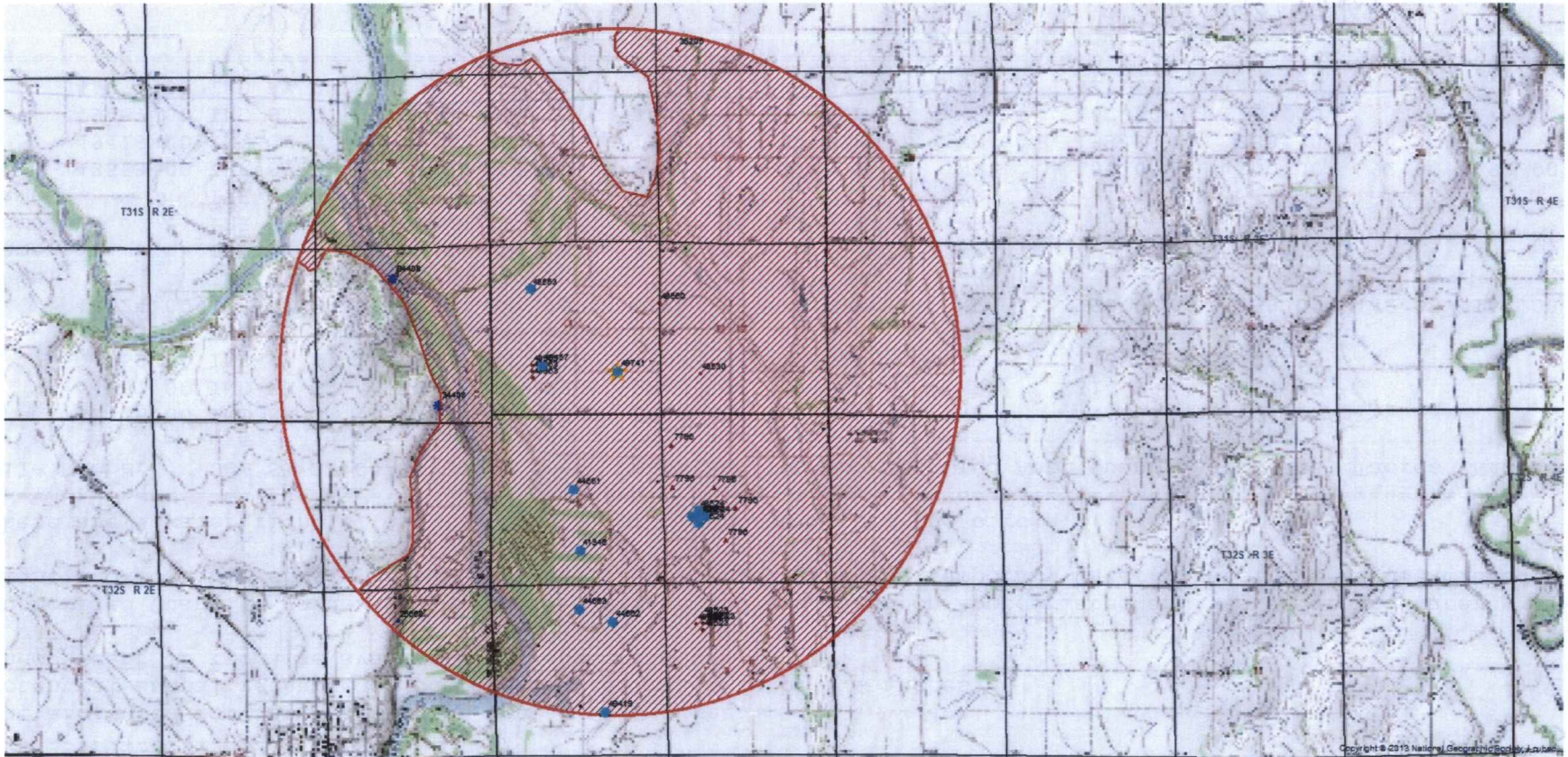
A__ 49457 00 IND GY G
> CORNEJO & SONS INC
> 2060 E TULSA
> PO BOX 16204
> WICHITA KS 67216

A__ 49741 00 IND AY G
> CORNEJO & SONS INC
> 2060 E TULSA
> PO BOX 16204
> WICHITA KS 67216

=====

Safe Yield Report Sheet
Water Right- A4974100
Point of Diversion in SENC 31-31S-3E 6 (85793)

=====



=====

132503
15.5851 = 3.0201

10/11

49,741

Analysis Results

The selected PD is in an area to new appropriations.
The safe yield, based on the variables listed below is 2,338.54 AF.
Total prior appropriation in the circle is 1,483.30 AF.
Total quantity of water available for appropriation is 855.24 AF.

-1056.3 = 1282.24 AF available

Safe Yield Variables

The area used for the analysis is set at 6929 acres.
Potential annual recharge of the area is estimated to be 5.4 inches.
The percent of recharge available for appropriation is 75%.

meets
S.Y.

Authorized Quantity values are as of 15-DEC-2016 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 9 water right(s) and 13 point(s) 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	Tacres	Nacres	
A 41346	00 IND	KK	G			NW	SW	SE	1000	2600	06	32	03E	2	WR	44.01	44.01		
A 44661	00 IND	KK	G			SE	SE	NW	2900	2800	06	32	03E	5	WR	314.99	314.99		
A 44662	00 IND	KK	G			SE	NW	NE	4100	1700	07	32	03E	5	WR	116.99	116.99		
A 44663	00 IND	KK	G			SE	NE	NW	4500	2750	07	32	03E	6	WR	30.01	30.01		
A 48524	00 IRR	GY	G			NE	NW	SW	2074	4124	05	32	03E	6	WR	150.00	150.00	142.00	142.00
Same	IRR	GY	G			NE	NW	SW	2274	4124	05	32	03E	7	WR				
Same	IRR	GY	G			SE	NW	SW	1874	4124	05	32	03E	8	WR				
Same	IRR	GY	G			NE	NW	SW	2074	4324	05	32	03E	9	WR				
Same	IRR	GY	G			NW	NE	SW	2074	3924	05	32	03E	10	WR				
A 48553	00 IRR	GY	G			NE	SW	NW	3910	3980	31	31	03E	1	WR	100.00	100.00	92.00	92.00
A 49419	00 IND	GY	G			NC	W2	SE	1320	1980	07	32	03E	7	WR	133.30	133.30		
A 49457	00 IND	GY	G			SW	NE	SW	1516	3685	31	31	03E	5	WR	167.00	167.00		
A 49741	00 IND	AY	G			NC	SE		1320	1320	31	31	03E	6	WR	427.00	427.00		

1056.3

427 pending

KANSAS DEPARTMENT OF AGRICULTURE
Division of Water Resources
M E M O R A N D U M

TO: Files

DATE: July 18, 2017

FROM: Matt Meier

RE: Application, File No. 49,741

The referenced application has been filed by Cornejo and Sons to appropriate groundwater for industrial use. The requested quantity of 427 acre-feet is to cover natural evaporative loss from the surface of a groundwater pit with a projected exposed surface area final size of 256 acres. The pit is located in the East Half of Section 31, in Township 31 South; and the Northeast Quarter of Section 6, in Township 32 South, all in Range 3 East, Cowley County, Kansas. Please NOTE: This application was filed for a **New Project Permit** for a proposed sand and gravel pit located **west** of the 18 inch evaporation line. Approval of this permit will authorize net evaporation as the primary use, and hydraulic dredging and sand washing as secondary uses of water if such secondary uses are located within the same source of supply and are associated with the operation (i.e. no related term permits are required for these activities). Any secondary uses must use water in a manner in which there is no significant net consumptive use. The point of diversion is the geographic center of the pit.

The requested quantity of 427 acre-feet was based on evaporation from an exposed surface area of 256 acres, and a potential net evaporation of 20 inches ((256 acres x 20 inches) / 12). The requested quantity appears to be reasonable to cover one year of natural evaporation. The applicant has submitted a "Notice of Intent to Open or Expand a Sand and Gravel Pit Operation" form, indicating they will be removing the sand by use of a hydraulic dredge and the project will continue until 2080. The applicant also states that the pit will be bermed and have vegetative strips to limit surface runoff into the pit.

In 2004 the United States Geological Survey (USGS) completed a hydrologic model of a portion of the Arkansas River and associated drainage basins (Ninnescah River), generally bounded by Ranges 2 West to 3 East and Townships 26 South to 34 South (near state line). The USGS model indicated that the aquifer in this area receives more recharge from precipitation than DWR has historically used in safe yield calculations. The data and analyses are detailed in the USGS Scientific Investigations Report 2004-5204 entitled "Characterization and Simulation of Flow in the Lower Arkansas River Alluvial Aquifer, South-Central Kansas". DWR subsequently completed an evaluation of the USGS model and determined that the precipitation recharge value of 5.4 inches per year that is used in the USGS model is reasonable and appropriate. In order to reserve water in the alluvial aquifers, which can contribute to base flow for area streams and for domestic use, it was determined that 75 percent of the 5.4 inches of precipitation recharge shall be available for appropriation. This is consistent with safe yield appropriation in many other basins across the state, and is the current percent available for all applications in the Ninnescah River drainage basin. Therefore, for all pending applications within the model area, safe yield will be evaluated using the standard methodology in K.A.R. 5-3-11, which is based on the extent of the unconfined aquifer (area of consideration), a Potential Annual Recharge value of 5.4 inches, and a percent of recharge available for appropriation of 75%.

Using an area of consideration of 6,929 acres (extent of the alluvium), with 5.4 inches of recharge, and 75% available, safe yield is 2,338.54 acre-feet. Existing water rights in this area have appropriated 1056.3 acre-feet, leaving 1,282.24 acre-feet available, and the application clearly complies with safe yield criteria.

The applicant did not identify any wells of any kind located within one-half mile of the center of the proposed groundwater pit. The only existing point of diversion within one-half mile is the geographic center of another pit (File No. 49,457) also owned by the applicant. A review of aerial photographs also does not show any nearby residences or evidence of domestic wells. Therefore, no notification letters are required. The WRIS database shows the nearest permitted water right not owned by the applicant is over 3,903 feet away.

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Based on the above discussion, the area is open to new appropriations, the application complies with DWR regulations, including safe yield calculations, and no senior water rights will be impaired, it is recommended that the referenced **Sand and Gravel Project Permit** application be approved.

Matt Meier
Environmental Scientist
Stafford Field Office

*Consent w/ recommendation Approve it
Jeff Kertman W.S.*