901 S. Kansas Avenue
Topeka, KS 66612

Kansas Water Office

Phone: (785)-296-3185
Fax: (785)-296-0878
www.kwo.org

Tracy Streeter, Director

Sam Brownback, Governor

December 9, 2011

Kale Horton,
U.S. Army Corps of Engineers,
Kansas City Regulatory Office,
635 Federal Building, 601 East 12th Street,
Kansas City, Missouri 64106-2896

Dear Mr. Horton:

The Kansas Water Office (KWO) asks that you consider the following comments regarding potential Kansas River dredging permits.

The KWO is opposed to approval of permits that would exacerbate or cause the degradation of the bed of the Kansas River beyond what is allowed in the current Kansas River regulatory program. Recent analysis by John Shelley, USACE, Kansas City District, of data collected at established cross sections, appears to indicate that the regulatory program that has been in place has had a positive impact on slowing the degradation of the bed of the Kansas River. (Hydrologic and Geomorphic Changes on the Kansas River", US Army Corps of Engineers, Kansas City District, September, 2010) Bed degradation is a cause of concern for many Kansas River users and is a priority issue within the *Kansas Water Plan*. Additional degradation threatens key water supply, flood control and transportation infrastructure.

If permits are granted in any given segment, the KWO requests that an adequate no dredging buffer zone be established above and below the intakes and wells for Topeka, Lawrence, Olathe and WaterOne.

Thank you for the opportunity to provide comments related to commercial dredging on the Kansas River. Please feel free to contact my office if you have questions regarding this issue.

Respectfully,

Tracy Streeter

Tracy Streeter
Director

Operations Office
512 SE 25th Ave.
Pratt, KS 67124-8174

Kansas
Department of Wildlife, Parks
and Tourism

Phone: (620) 672-5911
Fax: 620-672-6020
www.kdwp.state.ks.us

Robin Jennison, Secretary

Sam Brownback, Governor

December 9, 2011

Kale Horton, Project Manager
U.S. Army Corps of Engineers
Kansas City Regulatory Office
635 Federal Building
601 East 12th St.
Kansas City, MO 64106

Track: 20110952
Ref: D5.0900
Public Notice (PN):
2011-1460, 2011-1462,
2011-1463, 2011-1465,
2011-1466

Dear Mr. Horton:

The following comments pertain to the proposal from five companies, Kaw Valley Companies, Inc. (PN: 2011-1460), Holliday Sand & Gravel Company (PN: 2011-1462), Master's Dredging (PN: 2011-1465), Penny's Aggregates, Inc. (PN: 2011-1466), and Meier's Ready Mix/Victory Sand, LLC (2011-1463), to recommence dredging on previously mined reaches and open new reaches of sand/gravel dredging and removal operations on the Kansas River, Kansas. The project was reviewed for potential impacts on crucial wildlife habitats, current state-listed threatened and endangered species and species in need of conservation, and public recreation areas for which this agency has some administrative authority.

Dredging operations have been shown to have adverse impacts to the geomorphological, biological, and ecological functions of large river systems. Riverbed degradation results in various impacts such as bank erosion, channel widening, channel deepening, and reduction in the water table in the river channel and associated riparian zone. Impacts to aquatic invertebrates and fish communities occur with riverbed degradation by disturbance of habitat, increased sediment loads, change in flow velocities, and deepening of the river channel. Riverbed aggradation can be associated with negative impacts to large river systems as well. Riverbed aggradation results in an increase in streambed elevation, channel widening, reduced flow capacity, increase water temperatures, and decline in aquatic organism habitat.

Kansas State University (KSU) researchers will release a study on the environmental effects of sand/gravel dredging within the Kansas River in December or slightly thereafter. The preliminary findings from the KSU study details the adverse impacts of the dredging operations on the geomorphology and biota within the river, such as bed degradation, migrating head cuts, streambank erosion , lowering of floodplain water levels, and impacts to aquatic organism habitat. Preliminary findings lend that the dredging operations not only impact the Kansas River proper, but can also impact tributaries that flow into the Kansas River and the respective geomorphological and ecological functions in these tributaries as well.

The dynamic system of the Kansas River has been altered from current and historical dredging operations and necessitates a re-evaluation of short-term and long-term impacts to the hydrological functions and wildlife. We recommend that a new Environmental Impact Statement (EIS) analysis be conducted by the Corps of Engineers using on-site empirical investigations and current scientific peer-reviewed literature on how dredging activities impact the Kansas River system to date and the future. The new EIS should consider viable alternatives to dredging within the Kansas River, such as off-channel mining or dredging the states reservoirs and lakes that are sediment sinks. The new

EIS should address sediment loading and deposition within the Kansas River drainage and associated impacts to the Missouri River proper and drainage, the mechanisms and impacts of channel degradation and aggradation, water quality issues associated with dredging (e.g. extraction, settling ponds), impacts to aquatic and terrestrial organisms using current scientific literature and data, flow regimes associated with reservoirs and sediment loading, large-scale impacts within the Kansas River drainage and associated tributaries, and current socio-economic implications within the Kansas and Missouri River drainages. With that said and as part of maintaining the biological, chemical, and physical integrity of the U.S. running waters we recommend that all permits be held in abeyance until release of the KSU study and a new EIS is completed with public comment allowed thereafter.

The Kansas River is Designated Critical Habitat (DCH) for various state and federally endangered species which include not only aquatic organisms but terrestrial organisms as well. Therefore, if the applicants are permitted for the proposed activities an action permit from the Kansas Department of Wildlife, Parks and Tourism, Ecological Services Section, will be required for each applicant. A mitigation plan will be required to offset impacts to listed species and associated habitats. The permit may include special conditions such as monitoring and assessments of DCH, restoration of DCH, restriction dates on activities within the river channel to protect nesting and spawning events and disinfecting equipment to prevent the spread of invasive species as part of the mitigation.

Additionally, the Kansas River provide numerous ecological benefits for the persistence of the Bald Eagle, *Haliaeetus leucocephalus*, such as the adjacent riparian zone for roosting and nesting habitat, foraging areas along the river, and stopovers for migration flights. The Bald Eagle is protected under the Migratory Bird Treaty Act of 1918 and the Bald Eagle and Golden Eagle Protection Act of 1940. Dredging activities may be disruptive to nesting, roosting, and foraging eagles along the river reach.

Thank you for the opportunity to provide these comments and recommendations. If you have any questions or concerns please contact me at (620)-672-0795 or jason.luginbill@ksoutdoors.com.

Sincerely,

Jason S. Luginbill, Aquatic Ecologist
Environmental Services Section

PRATT OPERATIONS OFFICE
512 SE 25th Ave., Pratt, KS 67124-8174
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KSR&C No. 11-11-091

6425 SW 6th Avenue
Topeka, KS 66615

Kansas

phone: 785-272-8681
fax: 785-272-8682
email@kshs.org

Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

November 14, 2011

Kale Horton
Regulatory Project Manager
635 Federal Building
U.S. Army Corps of Engineers
601 E. 12th Street
Kansas City, Missouri 64106-2896

RE: Kansas River Dredging Permit Renewals
Permit Nos. 2011-1460, 1462, 1463, 1465, and 1466
Douglas, Jefferson, Jackson, Johnson, Leavenworth, Shawnee, and Wyandotte Counties

Dear Mr. Horton:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed your agency's public notice (dated November 9, 2011) regarding renewal of gravel dredging permits on the Kansas River. As indicated during similar reviews concerning dredging on the Missouri River, channel degradation and its associated impacts to cultural resources (primarily through tributary head cutting) is our main concern. However, it is our understanding that the dredging permit renewal requests are being processed with reference to the EIS and 1991 regulatory plan so as to minimize such impacts. Our office accordingly has no objection to the permit renewals.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Kim Gant at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and
State Historic Preservation Officer

Timothy Weston for

Patrick Zollner
Deputy SHPO

RECEIVED
REGULATORY BRANCH
2011 NOV 18 AM 10: 25

Division of Environment
Bureau of Water
Curtis State Office Building
1000 SW Jackson, Suite 420
Topeka, KS 66612-1367

Kansas

Phone: 785-296-5547
Fax: 785-296-0086
dcarlson@kdheks.gov
www.kdheks.gov

Robert Moser, MD, Secretary Department of Health & Environment Sam Brownback, Governor

December 7, 2011

RECEIVED
REGULATORY BRANCH
2011 DEC 12 AM 10: 55

Mr. Kale Horton
U.S. Army Corps of Engineers
Kansas City regulatory Office
635 Federal Building
601 East 12th Street
Kansas City, Missouri 64106-2896

Re: Kansas River Commercial Dredging Public Notice

Dear Mr. Horton:

In response to the U.S. Army Corps of Engineers (COE) 30-day public notice issued November 9, 2011 regarding issuance of Kansas River Commercial Dredging Permits under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403), the Kansas Department of Health and Environment (KDHE) offers the following comment for review and consideration by the COE. The Final Regulatory Report and Environmental Impact Statement for Commercial Dredging Activities On The Kansas River (January 1990) and the associated Regulatory Plan For Commercial Dredging Activities On The Kansas River includes provisions for both dredging restrictions and a monitoring program. One of the dredging restrictions addresses pipelines. It is unclear whether the COE had considered pipelines to include horizontal collector wells constructed and extend beneath the river. KDHE believes it would be prudent to ensure that these subsurface utilities are afforded adequate protection at least as protective as provided for pipelines. The City of Olathe has collector well systems immediately in the vicinity of two of the dredge sections proposed by Masters Dredging (26.1 to 27.6 and 28.3 to 29.8). We recommend the COE and dredgers identify and secure exact locations from the City of Olathe. In addition, the COE should continue to enforce the current dredging restrictions associated with public water supply system weirs, jetties, intake structures, pipelines, and other associated structures to ensure protection of these critical municipal utilities.

Should you have any questions regarding this letter, please feel free to contact me at (785) 296-5547.

Sincerely,

Donald R. Carlson

Donald R. Carlson, P.E., Chief
Industrial Programs Section
Bureau of Water

c. John Mitchell – KDHE DOE
Mike Tate – BOW
Dan Clair – BOW PWS
Scott Satterthwaite – BOW WMS

Kansas
Department of Agriculture
Division of Water Resources

109 SW 9th Street, 2nd Floor
Topeka, Kansas 66612-1283

phone: (785) 296-3717
fax: (785) 296-1176
www.ksda.gov/dwr

Dale A. Rodman, Secretary
David W. Barfield, Chief Engineer

Sam Brownback, Governor

December 9, 2011

RECEIVED
REGULATORY BRANCH
2011 DEC 14 AM 9:29

Mr. Kale Horton
U.S. Army Corps of Engineers
Kansas City Regulatory Office
635 Federal Building
601 East 12th Street
Kansas City, Missouri 64106-2896

Re: Kansas River Dredging Permits

Dear Mr. Horton,

This letter is a response to the November 9, 2011 public notice issued by the Kansas City District, related to dredging activities on the Kansas River. Proposed dredging activities are listed on eleven reaches of the river, to be completed by five companies. The notice states that 'the applicant has applied for a permit from the Kansas Department of Agriculture pursuant to …82a-301 to 305.'

Previous KDA (DWR) permits have been issued for dredging activities within these areas; however in several cases the previous permits do not cover the extents shown in the current public notice. In addition, land ownership, cross sections, adjacent improvements and floodplain mapping may have changed significantly since the previous DWR permits were issued. In these cases, the previous DWR permits will likely not be extended beyond December 31, 2012, and new DWR permits will be required to continue dredging activities beyond that date. The only exception to this will be the dredging activities shown between river miles 77.1 and 78.6; which were permitted by DWR in 2008.

We anticipate that new DWR permit applications will be approved for the proposed dredging activities, provided that they include adequate information to verify that the projects comply with applicable statutes and regulations. If you have any questions, please contact me at 785-296-3083.

Sincerely,

Chad Voigt

Chad Voigt, P.E.
Water Structures Program Manager

Division of Environment
Bureau of Water
Public Water Supply Section
1000 SW Jackson – Suite 420
Topeka, KS 66612

Kansas

Phone: 785-296-5514
Fax: 785-296-5509
www.kdheks.gov

Robert Moser, MD, Secretary Department of Health & Environment Sam Brownback, Governor

December 21, 2011

MR. KALE HORTON
US ARMY CORPS OF ENGINEERS
635 FEDERAL BUILIDNG
601 EAST 12TH STREET
KANSAS CITY, MO 64106-2896

Re: City of Bonner Springs, KS Objection to Commercial Dredging Activities on the Kansas River
Permit No. 2011-1462 (Holliday Sand & Gravel Company)

Dear Mr. Horton:

Your office recently received a letter dated December 9, 2011 from Mr. Brian Hoellein of Bartlett & West Engineers on behalf of Bonner Springs, KS regarding the city's objection to dredging activity on the Kansas River as described by the referenced permit. I need to clarify a comment made in the fourth paragraph of that letter regarding the classification of the city's public water supply system and accordingly I have separately responded to Mr. Hoellein in writing. Enclosed find copies of both letters.

I want to make clear that at no time during the meeting with the city of Bonner Springs and their consultant did KDHE directly state or indirectly imply that dredging activity on the Kansas River would automatically trigger an evaluation of the ground water classification of the city's public water supply system. The statement made in the fourth paragraph of Mr. Hoellein's letter dated December 9, 2011 letter, specifically "...if the proposed dredging operation occurs along the above-mentioned reach, then KDHE will evaluate the city's WTP classification..." is inaccurate. It is the results of the city's assessment of their source waters based on changes observed by the city that might necessitate a review of the classification of their public water supply system.

As part of protecting their public water supply system and public health, we've encouraged the city of Bonner Springs to acquire the services of qualified experts to assist them with any concerns they may have pertaining to this matter.

We respectfully request that this submittal and its attachments be included with the documentation pertaining to the referenced permit.

Please contact me at 785-296-5516 or at *dclair@kdheks.gov* if you have any questions or comments pertaining to this matter.

Sincerely,

Daniel H. Clair

Daniel Clair, PE
Unit Chief
Engineering & Permits Unit
Public Water Supply Section
Bureau of Water

DHC:lw
Enclosures
pc: City of Bonner Springs, w/o Enclosures, Attn: Rick Sallier
Northeast District

Division of Environment
Bureau of Water
Public Water Supply Section
1000 SW Jackson – Suite 420
Topeka, KS 66612

Kansas

Phone: 785-296-5514
Fax: 785-296-5509
www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

December 21, 2011

MR. BRIAN HOELLEIN, PE
BARTLETT & WEST ENGINEERS, INC
6919 VISTA DRIVE
WEST DES MOINES, IA 50266

Re: City of Bonner Springs, KS Objection to Commercial Dredging Activities on the Kansas River
Permit No. 2011-1462 (Holliday Sand & Gravel Company)
Bonner Springs, KS
PWS ID No. Federal ID #KS2020904 & State ID #D3500

Dear Mr. Hoellein:

This letter is in response to your December 9, 2011 letter to Mr. Kale Horton, US Army Corps of Engineers on behalf of Bonner Springs, KS regarding the city's objection to dredging activities on the Kansas River, Permit No. 2011-1462 (Holliday Sand & Gravel Company). The primary intent of this letter is to correct the inaccurate statement made in the fourth paragraph of the referenced letter and additionally clarify the discussion which transpired.

The city of Bonner Springs and its engineering consultant met with KDHE at the Curtis State Office Building in Topeka on December 6, 2011. The meeting covered several subjects including proposed dredging activities on the Kansas River. For the purpose of clarification, dredging activities would pertain not only to those activities proposed under the referenced permit, but also to the city's proposed self-directed dredging in that same reach of the Kansas River to remove accumulated residuals deposited over the years through the discharge of backwash water from their water treatment plant.

During the meeting we noted that dredging activities on the Kansas River may, and we respectfully emphasize the word "may," adversely impact the source waters for the city's public water supply system given their proximity to the Kansas River. Our intent was to determine if the city had any concerns and if they had acquired the services of qualified experts to assist them with understanding how the proposed dredging activities on the Kansas River might impact the water supply. From the conversation, it became apparent that an evaluative process had not yet been initiated.

Since the city has yet to initiate an evaluative process and because they were unfamiliar with issues pertaining to ground water (GW) and ground water under the influence of surface water (GWUDI), we provided some general insight to assist them in understanding how physical changes surrounding the city's water wells could impact their use. Significant changes in a well's performance and water quality, reduced capacity and increased turbidity, for example, could be an early indication of changes in a well's overall characteristics. If changes in a well's characteristics are observed, then the basic information we provided to the city will enable them to begin the process of assessing the significance of such changes. The determination of whether or not a well has come under the influence of surface water is commonly made through water quality and performance

DHC | MT (.pdf.) | 1. 6

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DEC 15 2011

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Bonner Springs

BARTLETT & WEST

SERVICE. THE BARTLETT & WEST WAY.

December 9, 2011

Kale Horton
U.S. Army Corps of Engineers
635 Federal Building
601 East 12th Street
Kansas City, MO 64106-2896

Re: Objection to Commercial Dredging Activities on the Kansas River
Permit No. 2011-1462 (Holliday Sand & Gravel Company)

Dear Mr. Horton:

Thank you for the opportunity to comment on the reauthorization of Commercial Dredging Activities on the Kansas River. Bartlett & West, on behalf of the City of Bonner Springs, Kansas, herein formally submits a factual objection to the reauthorization of Commercial Dredging Activities on the Kansas River from reach RM 19.4 – 20.15 because the proposed activity may substantially impact the city's water supply, creating an undue economic burden on the community.

The Bonner Springs water treatment plant (WTP) produces on average 1.15 million gallons per day from five wells, located on the left descending bank of the Kansas River between RM 19.4 – 20.15. See attached drawing for well locations. Although the facility's source water is from the river's alluvial aquifer, the WTP is not classified as "under the direct influence of surface water" (GWUI) by the Kansas Department of Health and Environment (KDHE). The process of collecting groundwater through the hydraulically connected alluvial sediments is known as riverbank filtration. Riverbank filtration removes particles, organic compounds, and pathogenic microorganisms from surface water (EPA 815-R-09-016, 2010); allowing utilities to indirectly take advantage of surface water resources without the high compliance costs associated with surface water treatment.

The production capacity and water quality enhancements provided by riverbank filtration rely on aspects such as riverbed hydraulic conductivity, channel morphology, and sediment transport (erosion or deposition). Major flooding, dam construction, and dredging operations all have acute and cumulative effects on the aspects that influence riverbank filtration effectiveness. Dredging operations can leave deep holes, can encourage bank erosion, and can cause bed degradation over time. In 1998 the Kansas Geological Survey determined the lower Kansas River is sensitive to degradation because incipient motion analysis of the bed load indicates that gravel sized material, the primary composition of the river's stream-bed, cannot be transported by the river under the present hydrologic conditions, except during large floods. Therefore, dredged material could not be replenished readily. Moreover, this cumulative degradation of the lower Kansas River stream-bed has been documented by USACE surveys.

Because of the acute and cumulative impacts dredging has on riverbank filtration effectiveness, KDHE expressed at a meeting on Dec 6, 2011 to the City and Bartlett & West that if the proposed dredging operation occurs along the above-mentioned reach, then KDHE will evaluate the City's WTP classification. This evaluation may or may not require microscopic particulate analysis (MPA). If the City's WTP is

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515.440.2856 ■ FAX 515.440.2858 ■ 866.869.8032
WWW.BARTWEST.COM

reclassified as GWUI, the City will be required to construct a surface water treatment plant, establish a new drinking water source, or purchase water from another municipality. An engineering cost estimate procured by the city in 2008 indicated GWUI reclassification may cost the community as much as $9.9 million ($11 million in 2012 dollars).

Commercial dredging along Kansas River RM 19.4 – 20.15 jeopardizes the City of Bonner Springs WTP source water status, potentially reclassifying the source as GWUI. Reclassification of the source water will create a substantial financial burden on the community. Therefore, Bartlett & West on behalf of the City of Bonner Springs, KS objects to the reauthorization of Commercial Dredging Activities on the Kansas River from reach RM 19.4 – 20.15. For this reason, we request that the Corps of Engineers extend the expiration of the public notice to allow the Corps of Engineers to publish a comprehensive analysis of the data collected under the Kansas River Dredging Activities Monitoring Plan. This additional time will also allow the City of Bonner Springs, KDHE, the dredging applicant, and Bartlett &West to discuss the proposed dredging in the area of the city's wells to see if there might be a way to work out a plan that protects the city's wells, but still allows the commercial enterprise to move forward.

Sincerely,

Brian L. Hoellein

Brian L. Hoellein P.E.

cc: City of Bonner Springs, Rick Sailer
LBG, Martha Silks
KDHE, Dan Clair
KDA-DWR, Katie Tietsort

Enclosure: Map of Well Locations

Bonner Springs Water Division
Bonner Springs, KS
WASTE WATER
TREATMENT FACILITY
WELL #5
WELL #4
WATER TREATMENT
PLANT & WELL #1
WELL #2
WELL #3
KANSAS RIVER
600 ft
© 2011 Google
Imagery Date: 6/5/2011
39°03'47.47" N 94°51'56.74" W elev 783 ft
Eye alt 4286 ft
BARTLETT & WEST
SERVICE, THE BARTLETT & WEST WAY.