

SUPPLEMENTAL
COMBINED DECISION DOCUMENT
MISSOURI RIVER COMMERCIAL DREDGERS
PERMIT EXTENSIONS

District-Permit No.	Permittee	Tonnage	River Reach
NWK -200101429	Capital Sand Company, Inc.	2,255,000	62.0-328.0
NWK -200101430	Hermann Sand and Gravel, Inc.	300,000	56.0-164.0
NWK -200101431	Holliday Sand and Gravel Company	2,160,000	320.0-459.0
NWK -200101434	Con-Agg of MO, LLC	175,000	177.85-201.95
MVS -P-2339	J.T.R. Inc. (Jotori Dredging)	750,000	30.0-35.0
MVS -P-2340	J.T.R. Inc. (Jotori Dredging)	300,000	1.0-12.0
MVS -P-2341	J.T.R. Inc. (Jotori Dredging)	500,000	14.0-24.0
MVS -P-2342	St. Charles Sand Company	1,200,000	0.0-47.0

This supplemental combined decision document (CDD) pertains to issuance of a modification to eight Department of the Army (DA) permits for Missouri River commercial sand dredging under authority of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C 403) and Section 404 of the Clean Water Act (33 U.S.C 1344). The Corps of Engineers is extending the expiration date of all eight permits to 31 December 2010. The authorized activities are located in the Missouri River between river miles 0.0 and 459.0 in Kansas and Missouri.

1. The work requested in this modification is associated with previously authorized work at the same location.
2. Reference is made to the Permit Evaluation and Decision Document of August 2007 (<http://www.nwk.usace.army.mil/regulatory/MO%20River%20Dredging/MO%20River%20Dredging%20CDD.pdf>) and the Supplemental Permit Evaluation and Decision Document of March 2008 (<http://www.nwk.usace.army.mil/regulatory/MO%20River%20Dredging/MO%20River%20Supplemental%20Decision.pdf>). This decision authorized four dredging operations within the Kansas City District's regulatory jurisdiction to continue dredging through 31 December 2009. At that time the St. Louis District also extended their Missouri River commercial dredging permits through 2009. As a condition of those decisions, the Kansas City and St. Louis Districts are currently preparing a joint Environmental Impact Statement (EIS) to be used to evaluate the applications for renewal of these permits and two proposed dredging operations. Because the Kansas City District has regulatory authority over 440 of the lower 490 miles and civil works authority over all 490 lower Missouri River miles, we are the lead district over this joint EIS. At the time these permits were issued we believed that an EIS could be completed by 31 December 2009, but the EIS has been delayed for various reasons. At this time we have a plan from the third-party-contractor (ENTRIX) and a contract between ENTRIX and the dredgers to have the EIS completed by 30 September 2010. I have determined that it is necessary to extend the existing permits through 31 December 2010 in order to finalize the EIS, complete the Record of Decision and issue permit decisions.

3. By email dated 1 September 2009, we notified U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (USEPA), Kansas Department of Health and Environment (KDHE), Kansas Department of Wildlife and Parks (KDWP), Kansas State Historic Preservation Office (KSHPO), Missouri Department of Natural Resources (MDNR), Missouri Department of Conservation (MDC) and Missouri State Historic Preservation Office (MSHPO) requesting their input regarding our intention to extend the existing dredging permits (Enclosure 1). No responses were received.

4. By letter dated 30 October 2009, we requested concurrence by the USFWS with our determination that extending the existing permits would not be likely to adversely affect any federally listed threatened or endangered species (Enclosure 2). USFWS concurred with that determination by letter dated 3 December 2009 (Enclosure 3).

5. On 30 October 2009, we sent a letter to the KDHE requesting a 401 Water Quality Certification for the extension (Enclosure 4) and on 10 November 2009, KDHE determined that with updates to the NPDES Permit list and public water supply references in conditions 5 g. and 5 h., the 14 June 2007 certification could be extended (Enclosure 5).

6. On 3 November 2009, we sent a letter to the MDNR requesting a 401 Water Quality Certification for the extension (Enclosure 6) and on 16 December 2009, MDNR extended their Certifications issued in 2007 (Enclosure 7).

7. The following information was considered in evaluating this modification:

a. Comments received in response to the Public Notice for Missouri River Commercial Dredgers, dated 27 June 2003, were discussed and addressed in the Permit Evaluation and Decision Document of August 2007 and the Supplemental Permit Evaluation and Decision Document of March 2008. These decision documents identified the contribution of commercial dredging to bed degradation of the Missouri River as the key issue requiring preparation of an EIS. By memo dated 24 June 2009 (Enclosure 8), the Kansas City District's River Engineering Section (River Engineering) identified concerns about dredging in the Kansas City reach. River Engineering stated that "recent bank failures at river mile 380, where degradation is the most advanced, bring to focus the potential dangers to infrastructure. Levees and floodwalls adjacent to the river channel throughout the reach are susceptible to significant damage if similar bank failures are initiated by degradation." According to River Engineering's analysis of water surface profiles collected since 2005 through the Kansas City reach, the river bed is continuing to degrade, particularly between river miles 360 and 410 where dredging is most active. River Engineering also stated that "continued removal of material will likely result in further degradation of the bed due to removal of the material itself and/or disruption of the natural stratification of sediment particle sizes in the thalweg." River Engineering cited a study completed in 1999 (Final Report Missouri Levee Unit L385 Sediment Analysis, May 1999) which stated "Over the period of record, the average annual bed load amount has been equal to 1.3 million (M) tons/year. Dredging in excess of the bed load amount would be expected to cause impacts to the channel and potentially surrounding infrastructure." Based on this analysis, the revetment failure at river mile 380, and the critical infrastructure such as levees reliant on those revetments, River Engineering recommended that dredging quantities in the Kansas City reach for 2010 be limited to the computed bed load of 1.3 M tons. They also recommended that

the removed material come from the dike-fields (areas between dikes along the inside river bends) instead of the thalweg portion of the river, to prevent disruption to the natural stratification of the sediment particles in the thalweg and to increase the likelihood of bed load capture.

b. The Regulatory Branch (Regulatory), Operations Division (Operations), Engineering Division (Engineering), Office of Counsel (Counsel), Levee Safety Committee and River Engineering met multiple times to discuss the River Engineering comments, and this process resulted in a revised draft proposal to extend the dredging permits with additional restrictions, believed necessary to mitigate potential impacts for the proposed one year extension, for the dredging operations of Holliday Sand and Gravel Company (Holliday Sand) in the Kansas City reach (river mile 328 to 400). Regulatory and River Engineering met with Holliday Sand on 8 September 2009 to discuss the tentative plan. Holliday Sand responded by letter dated 10 September 2009 (Enclosure 9). Regulatory and River Engineering held additional meetings with Holliday Sand on 29 September and 1 October 2009, and presented a general extension plan to all the Dredgers on 7 October 2009. At the 1 October 2009, meeting Regulatory proposed to require the two dredging operations authorized by the St. Louis District to implement the same type of full-time dredge monitoring and GPS systems and provide a hydrographic survey of their authorized dredging reaches in the lower 50 miles of the river as was required of the other four operators by the Kansas City District in 2007. Jotori Dredging and St. Charles Sand Company (Limited Leasing) argued that requiring this expensive upgrade for a one year extension without assured permits after 2010 would be unfair and unnecessary. They said they could use GPS systems they already have to record the dredged location for every barge load of sand and monthly provide this information in the same Excel spreadsheet that the other dredgers use. After discussion, Regulatory concluded that this plan would be adequate for 2010. The two dredgers did not object to the hydrographic survey requirement.

c. I met with Holliday Sand and Ash Grove (their parent company) on 20 October 2009, where they discussed their concerns and presented additional comments (Enclosure 10). In Enclosure 10, Holliday Sand estimated that even with the economic recession they would still need between 1.6 and 1.8 M tons of sand in 2010, and that there would be a projected shortfall of at least 0.3 M tons if dredging is limited to 1.3 M tons in 2010. Holliday Sand concluded that if they are limited to 1.3 M tons to be extracted exclusively from the dike-fields in the Kansas City reach, they would be forced to close their Riverside plant. This is based in their belief that it is practicable to operate within the dike-fields only during high flow conditions and that the proportion of coarse concrete grade sand available is generally low there until after high flow events. Holliday also demonstrated that the Hannibal (BNSF) rail bridge would be a substantial barrier to dredging downstream and transporting sand upstream to the Riverside plant. Additionally, the 1.3 M ton limit, combined with closure of the Riverside plant, would drive up market prices and competition, with ripple impacts to Ash Grove, including the closure of one of Ash Grove's ready-mix plants. Holliday identified 1.6 M tons, split between the Riverside and Randolph plants, as a quantity that would allow them to remain open at both plants. Holliday Sand and their parent company, Ash Grove, have proposed an alternative that they believe would be practicable, financially viable, and would prevent significant impacts to the river and associated infrastructure. Their proposal includes substantial restrictions intended to spread out dredging, limit dredging above the Hannibal Bridge to 0.8 M tons and make a good-faith effort to dredge in the dike-fields.

d. Regulatory evaluated Holliday Sand's comments and proposal (Enclosure 10) and determined that it proposed several tonnage limits that are not necessary and would not decrease the potential for degradation. Regulatory developed three alternatives that fit within and clarify the intent of Holliday Sand's proposal (Enclosure 11). The alternatives incorporate the tonnage limits and essential reach limits proposed by Holliday Sand and require them to confine dredging to the dike fields when the river stage is at or above 17 feet at the Kansas City gage. That is the elevation identified by Holliday Sand as providing adequate water depth to safely dredge areas near or within the dike-fields. Based on USGS gage data since October 1990, we estimate that this stage happens for about 23% of an average year. This would work out to about 2-3 months of no dredging (ice/cold), 7 months of dredging in channel and 3 months of dredging in dike fields. All three alternatives eliminate the no dredging zone between 366.1 and 364 and the 0.3 M ton limit between 353 and 328 in Holliday Sand's proposal. The difference in our three alternatives is to what portion of the Kansas City reach is the dike field dredging requirement applied. Regulatory believes that all three of the alternatives are practicable and viable variations of Holliday Sand's proposal, and recommends option 2 because it would confine dredging to the dike-fields when the Kansas City gage is at or above 17 feet in the most severely degrading portion between river mile 353 and 400, but would provide the opportunity at all times for Holliday to dredge anywhere in the existing authorized areas of the less degraded reach below 353.

e. By memo dated 5 November 2009 (Enclosure 12), Engineering provided a relative risk assessment and ranking of Holliday Sand's proposal and the alternatives Regulatory developed. Recommended option 2 was rated as one of the higher risk options, but Regulatory finds it important to put it in the context of historic dredging. From 1999 to 2003 Holliday Sand extracted in excess of 3.58 M tons peaking at 4.16 M tons in 2001. In 2007 we authorized Holliday Sand to extract up to 3.4 M tons in the Kansas City reach in 2007, up to 2.95 M tons in 2008, and up to 2.5 M tons in 2009. The 1.6 M tons identified by Holliday Sand as the minimum amount to maintain a viable operation is only 38.5% of what was extracted in 2001, 47.1% of what was authorized in 2007, and 64% of what is authorized to be extracted in 2009. It is also noted that while correlation between dredging and degradation has been identified, that relationship and causation of degradation from dredging is the subject of the EIS, which has not yet concluded. Finally, the authorized period being limited to one year is an important factor in determining impacts and the appropriate interim dredging allowance while the EIS is completed.

f. Regulatory acknowledges that from an engineering perspective it is best to avoid *any* additional risk to the river or levees from dredging. However, the Regulatory decision involves more than engineering analysis. The Regulatory decision must fall within the mitigated Finding of No Significant Impact (FONSI) and provide a practicable/viable project for the applicant, or the activity must be denied. The engineering risk analysis is considered and balanced with all of the other public interest factors. The Corps cannot issue a decision that would effectively be a "constructive denial" in that it has conditions so onerous that the project is not practicable or viable.

Regulatory is convinced that Holliday Sand provided a reasonable description of a viable project, and that permitting less than a project with 1.6 M tons, with half above the Hannibal bridge, and with some in channel dredging, would be a constructive denial. It has concluded that denial or

constructive denial of the Holliday Sand permit extension during the short time period that allows for completion of the EIS is not in the public interest. In looking for a practicable option that considered both the risk factors identified by River Engineering, and viability of Holliday at both plants, Regulatory has determined that the best course of action is to proceed with a one-year extension as follows:

- Up to 1.8 M tons between miles 400 and 320
- Up to 1.6 M tons of that amount between miles 400 and 328.
- Up to 0.8 M tons of the 1.8 M tons between miles 400 and 366.1 (Hannibal Bridge), with no more than 0.5 M Tons in each of the following: 400-378 and 378-366.1)
- Up to 0.5 M tons of the 1.8 M tons between miles 366.1 and 353.
- For miles 400-353, dredging is confined to the dike-fields (defined as existing authorized dredging areas between dikes along the inside river bends extending riverward from the existing landward limit to a line 200 feet beyond the end of the dikes) when ever the Missouri River is at or above 17 feet at the Kansas City gage.

Regulatory concludes that these restrictions, which include a substantial reduction in extraction and are much more restrictive than the current permit and are narrowly tailored to the time required to complete the EIS, do consider the risk to infrastructure in balance with other factors. With these restrictions, extending Holliday Sand's permit through 31 December 2010, will not impact additional landowners, and will not result in any new or additional significant environmental, economic, or social impacts and will allow us to complete the EIS.

g. Although the 2007 Decision Document and 2008 Supplemental Decision Document identified bed degradation as an issue throughout the lower Missouri River between Rulo, Nebraska and the confluence in St. Louis, Missouri, River Engineering has not expressed concern about extending permits for dredging outside the Kansas City reach (between river miles 328 and 400, only affects Holliday Sand) for one more year as currently authorized. Regulatory has determined that no new permit conditions are required for the Capital Sand, Hermann Sand and Con-Agg dredging operations but the Jotori Dredging and St. Charles Sand permits will have the following additional special permit conditions which are already required of the other four dredging operations.

- The permittee must survey each authorized dredging reach in 2010 in accordance with the attached Standard Operating Procedures for Hydrographic Surveying. The Corps will provide to the dredgers the benchmarks and baseline information from the Corps' 2007 hydrographic survey of the river. Surveys shall extend 2 miles upstream and 2 miles downstream of each dredged reach with transects every 250 feet. Surveys shall be completed between June and September. Where the permitted dredged reach of one dredger overlaps that of one or more other authorized dredging companies, the companies may choose to cooperate and provide just one survey report for that reach signed by all cooperating companies. The Corps will continue to provide assistance as needed with regard to the survey plan.

- The permittee must, for each dredge operated, record Global Positioning System (GPS) coordinates, tons of material removed, and the presence of any hard substrates or unusual concentration of gravel daily. If the dredge moves more than 100 feet in any one day then the amount of material removed from each location must be recorded separately. The operators may use hand-held GPS devices or automatically recording devices, but with which ever system used, must identify the device make/model and recording location. This information must be recorded on the attached Missouri River Commercial Dredging Location/Volume Report in an electronic spreadsheet. You must furnish a copy of the completed monthly report by email to charles.f.frerker@usace.army.mil at the St. Louis District Regulatory Branch and to cody.s.wheeler@usace.army.mil at the Kansas City District Regulatory Branch by the 7th day of the following month. If you do not receive an email confirmation that the report was received, you must contact the Regulatory Branch at 816-380-3990 for revised instructions for filing the monthly report.

This action will not impact additional landowners, and will not result in any new or additional significant environmental, economic, or social impacts and will allow the Corps to complete the EIS.

h. Therefore, based on the above, I have determined that extending the existing permits with the additional restrictions will not significantly increase the scope of the activity. In accordance with 33 C.F.R. 325.7, an additional public interest review will not be performed.

4. I find that extension of the existing permits with additional restrictions as prescribed by regulations published in 33 C.F.R. 320-332, is based on a thorough analysis and evaluation of the various factors enumerated above; that there are no reasonable alternatives available to the applicant that will achieve the purposes for which the work is being constructed; that the proposed work is in accordance with the overall desires of the public as reflected in the comments of state and local agencies and the general public; that the proposed work is deemed to comply with established state and local laws, regulations, and codes; that there have been no identified, significant, adverse, environmental effects related to the work; that the issuance of this permit is consonant with national policy, statutes, and administrative directives; and that on balance the total public interest should best be served by the approval of the modification.

12 Encls

12/18/2009
Date



Roger A. Wilson, Jr.
Colonel, EN
Commanding