Holliday Sand / Ash Grove's Position on the Proposed Modifications in the 2010 Permit Extension Plan

1

Meeting Agenda

- Introductions
- Brief History of Holliday Sand's Missouri River Dredging Operations
- Brief History of Ash Grove
- Purpose of this Meeting
- Proposed 2010 Modifications to Holliday Sand's Dredge Permit (Compared to 2009)
- Potential Impacts of the 2010 Permit Modifications
- Potential Alternatives to Missouri River Sand
- Holliday's Requested Permit Conditions
- Summary of Impacts, Alternatives, and Requested Conditions
- USACE's Need for the 2010 Permit Modifications
- Holliday's Position on the USACE Dredging Limit Determination

Brief History of Holliday Sand

- Holliday moves to Missouri River in late 1960's –
  - knowledge/resources from contract dredging experience of parent company

MO River Facility	Ten Year Average Production (tons) (1999-2008)	One Year Maximum Production (tons) (2001)
St. Joseph	354,645	448,113
Randolph	1,438,035	1,665,708
Riverside	1,651,635	2,034,483

- Average barge tow is approx. 3 miles for all facilities
- Maximum barge tow is approx. 5 to 10 miles
- Budgeted tonnage for 2010 – 1.6MM tons.

- Riverside Plant was invested in ($10 million) when dredging in the Kansas River was reduced to 1MM tons in the KC reach in 1990.
  - Kansas River tonnage reductions included a 4 year transition period.

Brief History of Ash Grove

- In Business Since 1882
- Privately Owned
- Largest American Owned Cement Company
- Corporate Headquarters in Overland Park, KS
- Employs 1,200 people in the KC area
- Purchased Holliday Sand on August 1, 2008

Incredible Value to Kansas City Metro of the Sand in the Missouri River

- Since 1990 has provided 60% of the sand for Greater Kansas City
- River Dredging is the only sustainable source for sand in KC
  - Rivers bring sand to our doorstep
- Eliminates annually over 90,000 truck loads of sand being hauled 20 miles each way from the outskirts of town = 3.6 million fewer truck miles
- Eliminates the annual loss of 80 acres of bottom land – now used for farmland and commercial development – and the tax revenue from those uses.
- Eliminates the energy loss and emissions needed to strip overburden – 1 million cubic yards each year.
- Flood Plain deposits are too fine – waste is often 50% or greater.
- Pits evaporate and potentially pollute municipal water wells

Cost of Pit Mining

3.6 million more truck miles
- Approx. 35 tons/loads for 2.5 million tons
- Additional 1 million gallons of fuel per year

Annual loss of 80 acres of bottom land
- 60 acres net after setbacks, slopes, and waste
- yields 50K tons/acre
- Loss of 1 square mile every 8 years

Energy loss in stripping 1 million cubic yards/year of overburden
- 10 foot depth over 60 acres
- $3 million/year due to stripping

Annual pit costs based on 2.5 million tons produced per year:
- Fuel: $2 million
- Land: $1 million
- Stripping: $3 million
- Fines waste: $3 million

Total pit cost $9 million/year based on 2.5 million tons per year
River dredging saved KC $108 million over the last 10 years (3 million tons averaged)

5A

Purpose of this Meeting

- Discuss the impacts of the COE proffered 2010 Dredge Permit Extension
- Request changes that will not result in significant impacts to: the Missouri River/Levee system, industry/economy of Missouri and Greater KC, or to Holliday Sand.Discuss the impacts of the COE proffered 2010 Dredge Permit Extension
- Request changes that will not result in significant impacts to: the Missouri River/Levee system, industry/economy of Missouri and Greater KC, or to Holliday Sand.

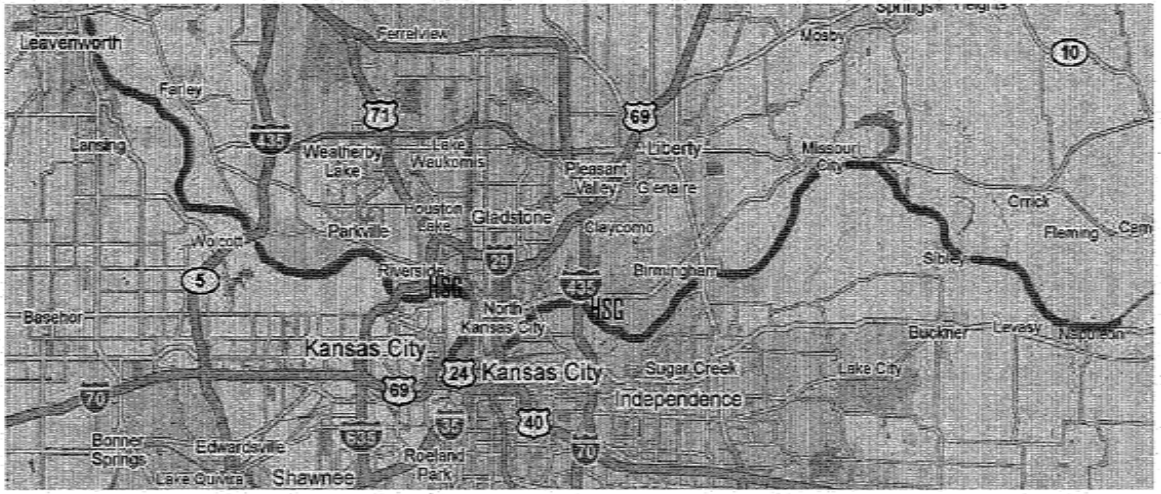
6

Substantial Modifications to Holliday Sand Permit Proposed by USACE October 2009

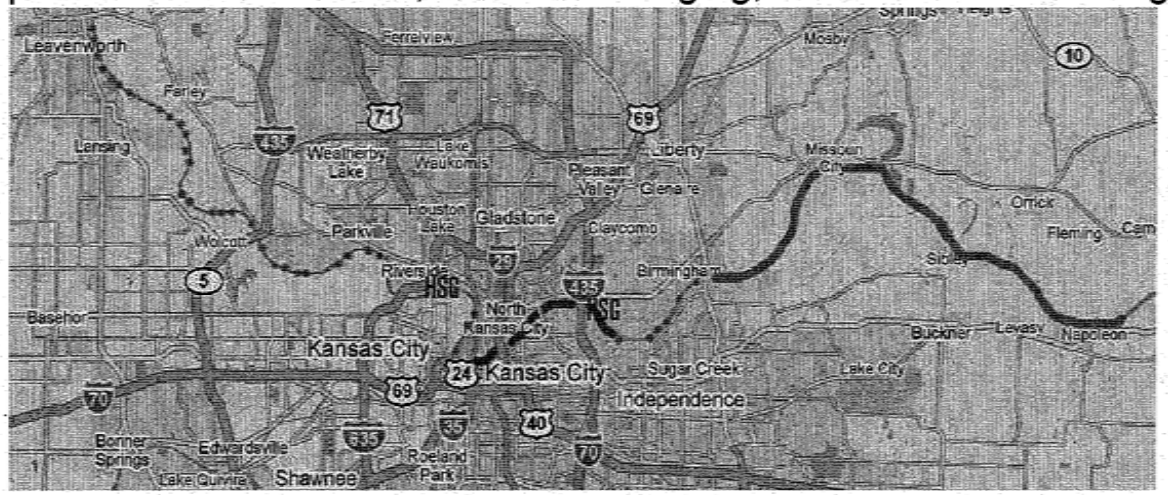
Existing 2009 Permit	Proffered 2010 Modification
2.5MM tons channel dredging in KC Reach (RM 328-400)	**0 tons in channel / RM 353-400** **1.3MM tons in channel / RM 328-353**
Dredge between RCL (in channel) / RM 328-400	Limited Dike Field Dredging only in KC reaches + 200' only, between RM 353-400
Currently dredge half our Randolph volume / RM 358-365	No dredging in this reach / RM 358-365
1.2MM tons in a 10 Mile Reach	700K tons in limited dike fields / RM 358-400
Makeup 900K tons below RM 328 if needed	Makeup 500K tons below RM 328 if needed

7

Current Permit with Plant Locations



Proposed 2010 Permit
(Purple: Limited Dike Fields, Red: No Dredging, Green: Channel Dredging)



8

Practical Limitations Under Proposed Permit Extension Plan

- Tonnage reduction from 2.5MM tons to 1.3MM tons with actual annual sales of 1.6MM tons during 2009
  - A projected shortfall of 300K tons based on historically slow year

- Proposal assumes Holliday can successfully dredge outside of the channel (active stream bed) within the limited dike fields
  - The quality of the material in those areas is unproven. Our experience has been that it takes a high water event to replace the fine sands that fill in the dike fields after they have been dredged once.
  - The portion of sand that cannot be used is returned to the river and grounds our vessels in anything but high water (9 foot raise or more).
  - If saleable material is not found in the dike fields, Holliday would have to move at least 19 miles downstream from our Riverside facility. The farthest we have ever towed upstream with existing equipment is 10 miles with empty barges.
  - **Continued operation of Riverside facility becomes contingent on sufficient saleable material in limited dike fields.**

Calculations for 19 mile tow from Riverside to Produce 1 Million Tons

- 10 hour round trip
- 1200 tons per barge
- 120 tons per hour
- 8,333 hours of towing per year required
  (23 hours a day / 365 days a year)

- 7 ½ month towing season
- Conclusion: *not possible*

9A

Economic Impacts Under Proposed Permit Extension Plan

- We examined profitability at Riverside and Randolph under proposed modifications with only 7-8 months of navigation and productivity losses due to rail bridges.
- Exceptionally long tows to downstream areas increases towing costs 500% due to increasing average tow from 3 miles to over 40 to Riverside unloading facility.
  - $2.3 million increase in towing cost
  - Pushes Riverside facility into net loss on every ton ($0.95)
- Randolph also net loss per ton ($0.33)

Economic Impacts Under Proposed Permit Extension Plan

- Conclusion: *Close Riverside unloading facility*
  - Choice is between running both plants at $1.025 million loss or run Randolph alone at full capacity
- Riverside closure company-wide impact:
  - Riverside facility itself: 2 shifts, 25 union plant employees and 15 dedicated truckers
  - Ash Grove's Fordyce Central Ave Ready Mix Concrete Plant shutdown: 25 union employees
  - Holliday mechanical shops: 15 union employees
  - Ash Grove and Holliday Sand: 10 salaried personnel
  - Ash Grove Material Transport (hauling): 12 wage employees

Holliday Sand Proposes a Plan to Allow Smooth Transition to Alternate Sources

- If we are successful in obtaining permits, property and capital at Nearman for a 2013 start
- Dike field dredging to be attempted first
- Channel dredging in 2010:

RM 400 to 366.1	RM 364 to 353	RM 353 to 328	RM 328 to 320
800,000 tons	500,000 tons	300,000 tons	900,000 tons

16

Summary

- Proposed Modifications for 2010 will have drastic impact on supply and delivered cost of sand and gravel in Kansas City, depressing construction activity in the region

- Proposed Modifications will result in direct loss of 100 jobs and $1 million operating loss to company *after shutdown of Riverside facility*

- EIS and Degradation Study are not complete, but Proposed Modifications are based on the foregone conclusion that dredging is the cause or a major contributor to harm to levees

- With sufficient advance notice, Holliday Sand has and will continue to make the investments needed to assure an efficiently produced, reliable source of sand and gravel for Kansas City

Doyle and Hauck Agenda

Proposed Agenda

- Present the USACE Missouri River Bed Degradation Reconnaissance Study
    - Exemplify the numerous assumptions and unscientific conclusions within the document
    - Provide the USACE with solid engineering facts and reasoning about the causes of degradation, and further point out the document does not contain any scientific data providing dredging even causes degradation.
- Present the USACE with the Bed Load Estimator study completed by Dr. Rob Jacobsen, in order to get a "scientific" understanding of the "sediment budget".
    - Preliminary bed load numbers have been delivered by the USACE. The accuracy and development of these numbers need to be explained. What assumptions were made to identify the bed load?
    - Discussion on Dr. Rob Jacobsen report
- A study completed to date proving dredging has NO short term impact on the Missouri River bed.
    - Why has this study not been mentioned in any report.
    - Why have there not been any follow up on the findings of this study
    - Show the Colonel the ability of a dredge hole to recover

Holliday Sand / Ash Grove's Position on the Modifications Based on Precedent and Available Evidence

- No verifiable evidence has been presented that links dredging to the unusual degradation observed in the Kansas City reach
- In other locations where there has been extensive dredging, minimal degradation compared to the Kansas City reach.
- Correlation between degradation and:
  - cutoffs (14 feet, per USACE *Recon Report*)
  - flow
  - 1993 flood
  - channel velocity
  - bend radius
  - floodway width

  should be addressed in addition to correlation with dredging activity in determining causation.

Location Restriction (First Component) Analysis Based on Data Collected at Problematic Site

- The airport bend is basically a curved chute with a clear water jet injected on the outside of the bend with bridge piers adding turbulence.
- During the 1993 flood caused by the Kansas River, the energy and velocity of the flows focused in the downtown reach scoured sediments, flushed them downstream, and resulted in a headcut that is still operating.
- In summary, we feel that surface and bottom soundings from the Hannibal Bridge should not be considered representative of the conditions in the Kansas City reach.

Volume Restriction (Second Component) Analysis Based on Incomplete Evidence

- There is evidence of aggradation below Kansas City
  - This is not likely unless there is a surplus of sediments going though the Kansas City reach
- Reestablishment of the active stream bed
  - Material will not stay in the downtown area until velocity is reduced
  - There has been no experiment to shorten dikes to reduce the velocity in the Kansas City channel

Recent Discovery of Revetment Toe Erosion as Related to Dredging Activity

- Levee toe erosion was identified in three critical areas:
  - Right above the Kansas river confluence (367.8), repaired in 1968, is not relevant
    - Other sheet piling failures in area were due to tie-back failures instead of kick-out
  - Below the Paseo Bridge (364.5)
  - At RM 370.1, received emergency repairs in 2009
- No-dredge zones can be established to relieve trouble spots when they occur.
- Effect of 10 foot degradation evaluated in the *Memorandum*
- Current 2-year snapshot at Hannibal Bridge gage shows 1 foot degradation
- Should be a negligible concern for 2010