KAPA Research & Specifications (R&S)
KRMCA Technical and Quality Control (TQC)
Quarterly Committee Meeting
Zoom Meeting
TUESDAY – OCTOBER 26, 2021 – 1:00 PM

AGENDA

1. Introductions
2. Anti-Trust Statement
3. Review and Approval of Minutes from 7/20/21 Meeting

Follow up from previous meetings

4. Update from KDOT on plasticity testing action items from last meeting to be implemented
    a. Recent tests with unexpected results
5. Further discussion on Portland Limestone Cement (PLC)
    a. Are we all prepared for greater usage?
6. AS-1 proposed spec
    a. Discussion of industry concerns and comments
7. KDOT review of discussed requirements for base under stockpiles

New Items

8. Blind sample recap and review of results to date
9. Open discussion on what observations, impacts or problems, if any, are being experienced on projects (specifically related to sample collection, preparation and testing) now that there is a significantly higher usage of consultant (LPA) inspectors being used.
10. Update on KDOT's new freezer
11. AWP Updates – Blind samples not able to be processed as currently done. Discussion of blind samples in AWP
12. Haul Hub – Presentation about KDOT and E-Ticketing
13. Other items from KDOT or producers
14. Adjourn

ANTITRUST POLICY STATEMENT

The Kansas Aggregate Producers and the Kansas Ready Mixed Concrete Association assigns the highest priority to full compliance with both the letter and the spirit of antitrust laws. Agreements among competitors that unreasonably limit competition are unlawful under federal and state antitrust laws, and violators are subject to criminal fines and incarceration, civil fines, and private treble-damage actions. Even the successful defense of the antitrust litigation or an investigation can be very costly and disruptive. It is thus vital that all meetings and activities of the Associations be conducted in a manner consistent with the Association's antitrust policy.

Examples of illegal competitor agreements are those that attempt to fix or stabilize prices, to allocate territories or customers, to limit production or sales, or to limit product quality and service competition. Accordingly, it is inherently risky and potentially illegal for competitors to discuss under Association auspices, or elsewhere, the subjects of prices, pricing policies, other terms and conditions of sale, individual company costs (including planned employee compensation), the commercial suitability of individual suppliers or customers, or other factors that might adversely affect competition.

It is important to bear in mind that those in attendance at Association meetings and activities may include competitors, as well a potential competitors. Any discussion of sensitive antitrust subjects with one's competitors should be avoided at all times, before, during, and after any Association meeting or other activity. This is particularly important because a future adversary may assert that such discussions were circumstantial evidence of an illegal agreement, when viewed in light of subsequent marketplace developments, even though there was, in fact, no agreement at all.

If at any time during the course of a meeting or other activity, Association staff believes that a sensitive topic under the antitrust laws is being discussed, or is about to be discussed, they will so advise and halt further discussion for the protection of all participants. Member attendees at any meeting or activity should likewise not hesitate to voice any concerns or questions that they may have in this regard.

Meeting Minutes
Kansas Aggregate Producers' Association
Research & Specification Committee
Kansas Ready Mixed Concrete Association
Technical Quality Control Committee
July 20, 2021 – 1:30 PM – Basement Conference Room – 800 SW Jackson St. / Topeka, KS

1. The meeting was called to order by Jerry Younger, Managing Director, KAPA-KRMCA. Chairman Bill Beggs was present. A list of participants can be found at the conclusion of the minutes.

2. Review of Antitrust Statement – Members present were provided a copy of, and asked to review and abide by the Antitrust Statement during the meeting.

3. Approval of minutes from 4/26/21 Quarterly Meeting – There were no edits or comments offered to the Minutes of the April 26, 2021 R&S/TQC Meeting. On Motion, Neal Morris moved, Kelly Briggs seconded to approve minutes as presented. Motion passed.

4. **Follow up on items from previous R&S/TQC Meetings:**

   Plasticity Tests - Luke Matheny gave update on the status of KDOT's internal actions to address previous industry concerns with plasticity/proctor test on aggregate material. KDOT will notify producer if a test fails and KDOT will retest. KDOT will also notify Quarry Monitors of test results. Industry requests that all KDOT Districts follow the same process. Going forward KDOT will invite Quarry Monitors and District Maintenance Engineers to participate in future R&S/TQC Meetings.

   Low Strength Test Results – Chris Leibrock reported KDOT is looking at information from CMS to see if this is an isolated issue or statewide. Industry still wants to form a small working group to continue the discussion on developing a reasonable and mutually fair process for addressing disputable low strength test results.

Proposed Maturity Specification – Dan Wadley thanked industry for their comments to KDOT's draft Spec (Section 745) on Maturity Method for Concrete Strength for Structures and said the door is still open for any last-minute changes/edits, but KDOT was basically waiting on LeAnn to complete her final edits. Attendees were provided a copy of the updated spec highlighting changes that were made, including an explanation paragraph of step 5, "Verify installation, operation, and strength-maturity relationship, using standard cured 2-day cylinder breaks." Cleaned up some sentences in the Maturity Sensors paragraph. Added sentence in the Verify Calibration paragraph dealing with sensor reader, and added sentence regarding reporting results of the calibration verification to the KDOT Engineer with the Instrumentation Plan. To emphasis its importance, "Failure to meet strength requirements will require the contractor to follow the time/load limitation tables in SECTION 710" was moved up to a stand alone sentence instead of a footnote at the bottom of the table.

Neil Morris raised the question of how seasonality will result in some variance in the validation process, siting the Gold Project as an example. KDOT suggested they address any issues on a case-by-case bases.

Fly Ash Availability Update – KDOT reported that they had not heard of any fly ash shortages. Industry partners know it's a matter of time before fly ash will not be available.

5. **KDOT Quarry Road Reimbursement Policy**
   Jerry updated the group on some county impact fee issues the Association is encountering, and that that KDOT already has some mechanism for reimbursing counties. Greg will review KDOT procedures and report back.

6. **Portland-Limestone Cement**
   KDOT reported some limited use of Portland-Limestone Cement in Gove County. Monarch is using Portland-Limestone Cement for one of their new buildings.

7. **FAA Projects (RE: KTMR-22 Compliant Aggregate)**
   Jerry reported the Concordia FAA project was finally approved with KDOT's help. Jerry wants to continue discussions with KDOT and a smaller group. The question was raised as to whether this subject would make for a good KTran Project.

8. **Material Availability**
   Discussion of potential/anticipated material availability issues for the remainder of the construction season. Greg reported that KDOT is currently addressing any of those issues on a case-by-case bases. With the IKE Project announcements calendar years were provided, not letting dates. Some uncertainty on funding still exists with possible federal stimulus money and requirements.

9. **MSE Wall Spec Update**
   Chris Leibrock reported on the research from the KTran Project. Industry feels the gradation specification should be revisited. KDOT's current gradation spec is available online for review.

10. **AS-1 Rock**
    Chris Leibrock reported that it was District 1 that was having some problems with shoulder rock, primarily centered around plasticity requirements.

11. **AWP Updates**
    Rick Barezinsky reported that CMS will shut down on October 22nd, followed by migration and AWP going live on November 15th.

12. **Other Topics**
    Bill Beggs asked if there was a possibility of KDOT setting requirements for a new spec for the base under stockpile material. KDOT will follow up.

    Greg Schieber reported effective with the September letting, KDOT is proposing closing off all Q&A on Monday @ Noon before the letting, and posting answers and any addendums by Noon on Tuesday.

    KDOT's Certified Inspector Program will hold all of their classes virtually with performance test in person.

Respectfully submitted,

Jerry Younger, P.E.
Managing Director

Attendance:
Bill Beggs, Chris Leibrock, Rick Barezinsky, Dan Wadley, Greg Schieber, Clay Adams, Kelly Briggs, Colton Lottmann, Luke Metheny, Tony Menke, Sally Mayer, Neil Morris, Erin McArtor, Brian Durr

Staff – Jerry Younger, Peggy Hansen-Nagy

KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION

Delete SECTION 1113 and replace with the following:

SECTION 1113

AGGREGATES FOR SHOULDER CONSTRUCTION

1113.1 DESCRIPTION

This specification covers types of aggregates for shoulder construction and aggregates for edge wedge construction.

1113.2 REQUIREMENTS

a. Composition.

(1) Type AS-1 and EW-1 is a mixture of aggregate and binder with at least 85% the material produced by the mechanical crushing of limestone, dolomite or sandstone.

b. Quality[1].

- Soundness[2], minimum (KTMR-21) 0.85
- Wear[3], maximum (AASHTO T 96) 50%
- ~~Specific Gravity[4] (dry), minimum (KT-6 Procedure I) ..... 2.20~~

[1]Crushed aggregates with less than 10% material retained on the No. 4 sieve (excluding mineral filler supplements) must be produced from a source complying with the official quality requirements of this Section prior to crushing.

[2]The above requirements for soundness do not apply for aggregates having less than 10% material retained on the No. 4 sieve.

[3]The above requirements for wear do not apply to aggregates having less than 10% material retained on the No. 8 sieve.

[4]~~Apply the specific gravity requirement to individual materials and to any combination of materials required to meet the grading and plasticity requirements.~~

Commented [LAL[1]]: This line and Note 4 are removed by Errata.

c. Product Control.

(1) Gradation and Plasticity. Provide aggregate that complies with **TABLE 1113-1**.

TABLE 1113-1: GRADING AND PLASTICITY REQUIREMENTS FOR AGGREGATES FOR SHOULDER AND EDGE WEDGE CONSTRUCTION

Type	Percent Retained - Square Mesh Sieves								P.I.	L.L.[1] (Max)	Ratio[2] (Max)
	2"	1½"	¾"	3/8"	No. 4	No. 8	No. 40	No. 200			
AS-1	0	0-5	5-30		35-60	45-70	60-84	80-92	4-10	30	3/4
EW-1	0	0-5	5-30		35-60	45-70	60-84	80-92	1-8	30	3/4

[1]Liquid Limit

[2]Ratio of percent passing the No. 200 sieve to the percent passing the No. 40 sieve.

(2) Deleterious Substances. Provide aggregates for shoulder construction that are free from grass, weeds, roots, sticks, and other undesirable foreign matter.

d. Stockpiling. Stockpile and handle aggregates in such a manner to prevent detrimental degradation and segregation, the incorporation of appreciable amounts of foreign material, and the intermingling of stockpiled materials.

1113.3 TEST METHODS

Test aggregates according to the applicable provisions of **SECTION 1115**.

1113.4 PREQUALIFICATION

Prequalify aggregate sources according to **subsection 1101.4**.

1113.5 BASIS OF ACCEPTANCE

Aggregates covered by this subsection are accepted based on the procedures described in **subsection 1101.5**.

07-21-2021 C&M (CL)
Xxx-2021 Letting

KDOT BLIND DATA

	Sample ID	Producer ID	Lab #	Micro-Deval	Wear	F-T Soundness	I Gsb Dry	I Gsb SSD	I Gsb App	I Abs	1"	3/4"	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
			All	15.0%		+/- 0.03															
			Multi		12.7%		0.038	0.032	0.032	0.41				Deviation varies based on percent material passing							
			Single		5.7%		0.025	0.020	0.020	0.25											
1	*1155697*	*800950*	*21-1941*	*45.7*	*37*	*0.82*	*2.405*	*2.501*	*2.661*	*4.0*	*0*	*7*	*29*	*45*	*79*	*95*	*95*	*96*	*97*	*97*	*98.2*
2	*1151582*	*800950*	*21-1561*	*47.0*	*46*	*0.86*	*2.384*	*2.470*	*2.607*	*3.6*	*0*	*8*	*31*	*48*	*81*	*95*	*95*	*96*	*97*	*97*	*97.8*
			diff	-1.3	-9.0	0.04	0.021	0.031	0.054	0.40	0	1	2	3	2	0	0	0	0	0	0.4
			avg	46.4	41.5																
			%	1.4	10.8																
1	*1155701*	*801813*	*21-1942*	*55.3*	*46*	*0.81*	*2.208*	*2.355*	*2.589*	*6.7*	*0*	*8*	*42*	*60*	*91*	*97*	*98*	*98*	*98*	*98*	*98.4*
2	*1151349*	*801813*	*21-1551*	*52.0*	*53*	*0.85*	*2.216*	*2.356*	*2.577*	*6.3*	*0*	*10*	*39*	*58*	*90*	*97*	*97*	*97*	*97*	*98*	*98.0*
			diff	3.3	-7.0	0.04	0.008	0.001	0.012	0.40	0	2	3	2	1	0	1	1	1	0	0.4
			avg	53.7	49.5																
			%	3.1	7.1																
1	*1150763*	*826018*	*21-1766*	*14.9*	*36*	*0.98*	*2.614*	*2.635*	*2.670*	*0.8*	*0*	*5*	*51*	*81*	*99*	*99*	*99*	*99*	*99*	*99*	*99.8*
2	*1150760*	*826018*	*21-1518*	*14.7*	*38*	*0.97*	*2.589*	*2.614*	*2.655*	*1.0*	*0*	*0*	*41*	*81*	*99*	*99*	*99*	*99*	*99*	*99*	*99.5*
			diff	0.2	-2.0	0.01	0.025	0.021	0.015	0.20	0	5	10	0	0	0	0	0	0	0	0.3
			avg	14.8	37.0																
			%	0.7	2.7																
1	*1151580*	*800970*	*21-1296*	*37.9*	*36*	*0.86*	*2.512*	*2.595*	*2.739*	*3.3*	*1*	*23*	*59*	*76*	*93*	*97*	*97*	*98*	*99*	*99*	*99.1*
2	*1152990*	*800970*	*21-1688*	*33.5*	*32*	*0.90*	*2.554*	*2.627*	*2.756*	*2.9*	*0*	*21*	*59*	*75*	*92*	*95*	*97*	*97*	*97*	*98*	*98.6*
			diff	4.4	4.0	0.04	0.042	0.032	0.017	0.40	1	2	0	1	1	2	0	1	2	1	0.5
			avg	35.7	34.0																
			%	6.2	5.9																
1	*1147778*	*801512*	*21-1258*	*35.2*	*39*	*0.86*	*2.414*	*2.520*	*2.701*	*4.4*	*2*	*16*	*52*	*67*	*93*	*99*	*99*	*99*	*99*	*99*	*98.8*
2	*1152028*	*801512*	*21-1601*	*34.5*	*38*	*0.84*	*2.415*	*2.520*	*2.697*	*4.3*		*17*	*54*	*71*	*96*	*99*	*99*	*99*	*99*	*99*	*99.0*
			diff	0.7	1.0	0.02	0.001	0.000	0.004	0.10	2	1	2	4	3	0	0	0	0	0	0.2
			avg	34.9	38.5																
			%	1.0	1.3																
1	*1146695*	*801935*	*21-1154*	*18.7*	*30*	*0.97*	*2.538*	*2.593*	*2.685*	*2.2*	*2*	*16*	*52*	*67*	*93*	*99*	*99*	*99*	*99*	*99*	*98.8*
2	*1152033*	*801935*	*21-1602*	*18.4*	*30*	*0.97*	*2.540*	*2.593*	*2.684*	*2.1*		*17*	*54*	*71*	*96*	*99*	*99*	*99*	*99*	*99*	*99.0*
			diff	0.3	0.0	0.00	0.002	0.000	0.001	0.10	2	1	2	4	3	0	0	0	0	0	0.2
			avg	18.6	30.0																
			%	0.8	0.0																
1	*1144900*	*847901*	*21-0942*	*6*	*35*	*0.94*	*2.549*	*2.583*	*2.639*	*1.3*			*14*	*28*	*68*	*79*	*83*	*86*	*88*	*92.0*	*94.8*
2	*1146635*	*847901*	*21-1183*	*8*	*30*	*0.98*	*2.563*	*2.596*	*2.650*	*1.3*		*1*	*35*	*59*	*89*	*94*	*96*	*97*	*97*	*98*	*99.0*
			diff	-1.6	5.0	0.04	0.014	0.013	0.011	0.00	0	1	21	31	21	15	13	11	9	6	4.2
			avg	7.2	32.5																
			%	11.1	7.7																
1	*1143269*	*849302*	*21-0870*	*36*	*30*	*0.96*	*2.605*	*2.652*	*2.735*	*1.8*			*27*	*49*	*91*	*99*	*99*	*99*	*99*	*100*	*99.7*
2	*1145665*	*849302*	*21-1033*	*22*	*29*	*0.98*	*2.642*	*2.680*	*2.747*	*1.4*			*23*	*51*	*91*	*99*	*99*	*99*	*99*	*99*	*99.4*
			diff	13.9	1.0	0.02	0.037	0.028	0.012	0.40	0	0	4	2	0	0	0	0	0	1	0.3
			avg	28.6	29.5																
			%	24.3	1.7																
1	*1141203*	*843519*	*21-0570*	*7.5*	*33*	*0.95*	*2.575*	*2.603*	*2.647*	*1.1*	*1*	*2*	*13*	*26*	*90*	*98*	*99*	*99*	*99*	*100.0*	*100.0*
2	*1143245*	*843519*	*21-0869*	*7*	*36*	*0.97*	*2.532*	*2.560*	*2.670*	*1.1*	*4*	*12*	*18*	*32*	*78*	*92*	*98*	*98*	*99*	*99*	*99.6*
			diff	0.9	-3.0	0.02	0.043	0.043	0.023	0.00	3	10	5	6	12	6	1	1	0	1	0.4
			avg	7.1	34.5																
			%	6.4	4.3																
1	*1146911*	*801835*	*21-1209*	*20*	*26*	*0.99*	*2.491*	*2.549*	*2.644*	*2.3*		*60*	*85*	*99*	*99*	*99*	*99*	*0*	*99*	*99*	*99.9*
2	*1140426*	*801835*	*21-0484*	*19*	*26*	*0.98*	*2.513*	*2.571*	*2.668*	*2.3*		*80*	*92*	*99*	*99*	*99*	*99*	*0*	*100*	*100*	*99.9*
			diff	0.6	0.0	0.01	0.022	0.022	0.024	0.00	0	20	7	0	0	0	0	0	1	1	0.0
			avg	19.5	26.0																
			%	1.5	0.0																
1	*1148326*	*801836*	*21-1288*	35	37	0.95	*2.284*	*2.385*	*2.587*	*5.6*	*11*	*31*	*46*	*71*	*91*	*96*	*97*	*0*	*97*	*97*	*99.0*
2	*1150848*	*801836*	*21-1521*	*38*	*30*	*0.96*	*2.278*	*2.396*	*2.582*	*5.2*	*7*	*31*	*51*	*93*	*98*	*98*	*98*	*0*	*98*	*98*	*98.6*
			diff	-2.7	7.0	0.01	0.006	0.011	0.005	0.40	4	0	5	22	7	2	1	0	1	1	0.4
			avg	36.7	33.5																
			%	3.7	10.4																
1	*1140748*	*801719*	*21-0519*	*30*	*28*	*0.94*	*2.606*	*2.660*	*2.753*	*2.1*	*0*	*17*	*54*	*71*	*96*	*99*	*99*	*99*	*99*	*99*	*99.0*
2	*1145385*	*801719*	*21-0990*	*27*	*26*	*0.96*	*2.628*	*2.665*	*2.730*	*1.4*	*0*	*16*	*52*	*67*	*93*	*99*	*99*	*99*	*99*	*99*	*98.8*
			diff	3.3	2.0	0.02	0.022	0.005	0.023	0.70	0	1	2	4	3	0	0	0	0	0	0.2
			avg	28.3	27.0																
			%	5.8	3.7																
1	*1139772*	*826001*	*21-0478*	*16*	*23*	*0.98*	*2.573*	*2.601*	*2.648*	*1.1*	*0*	*30*	*94*	*99*	*99*	*99*	*99*	*99*	*99*	*99*	*99.0*
2	*1139776*	*826001*	*21-0835*	*17*	*34*	*0.98*	*2.534*	*2.572*	*2.635*	*1.5*	*0*	*41*	*93*	*99*	*99*	*99*	*99*	*99*	*99*	*100*	*99.7*
			diff	-1.2	11.0	0.00	0.039	0.029	0.013	0.40	0	11	1	0	0	0	0	0	0	1	0.7
			avg	16.6	28.5																
			%	3.6	19.3																
	Reran second sample - results=>				*32.0*		*2.562*	*2.595*	*2.650*	*1.3*											
					9.0		0.011	0.006	0.002	0.20											
					27.5																
					16.4																
1	*1139714*	*803903*	*21-0417*	*20*	*27*	*0.98*	*2.554*	*2.603*	*2.685*	*1.9*	*0*	*0*	*31*	*56*	*93*	*98*	*98*	*98*	*98*	*99*	*99.0*
2	*1143156*	*803903*	*21-0849*	*19*	*28*	*0.98*	*2.531*	*2.583*	*2.671*	*2.1*	*0*	*0*	*27*	*52*	*93*	*99*	*99*	*99*	*99*	*99*	*99.1*
			diff	0.1	-1.0	0.00	0.023	0.020	0.014	0.20	0	0	4	4	0	1	1	1	1	0	0.1
			avg	19.5	27.5																
			%	0.3	1.8																
1	*1138183*	*843518*	*21-0303*	*30*	*27*	*0.90*	*2.450*	*2.518*	*2.628*	*2.8*	*0*	*1*	*94*	*99*	*99*	*99*	*99*	*99*	*99*	*99*	*100.0*
2	*1140229*	*843518*	*21-0482*	*24*	*27*	*0.96*	*2.405*	*2.497*	*2.647*	*3.8*	*0*	*1*	*90*	*99*	*99*	*99*	*99*	*99*	*100*	*100*	*99.9*
			diff	5.7	0.0	0.06	0.045	0.021	0.019	1.00	0	0	4	0	0	0	0	0	1	1	0.1
			avg	26.8	27.0																
			%	10.7	0.0																
	Reran second sample - results=>						*2.427*														
							0.023														