

# 1101 - GENERAL REQUIREMENTS FOR AGGREGATES

## SECTION 1101

### GENERAL REQUIREMENTS FOR AGGREGATES

#### 1101.1 DESCRIPTION

This specification covers the basis of approval, certification and acceptance of aggregates specified in **DIVISION 1100**.

#### 1101.2 REQUIREMENTS

**a. General.** Provide aggregates that comply with all composition, quality, product control, and handling (stockpile) requirements of the applicable specifications.

**b. Process Control.**

(1) Perform or cause to be performed all inspections and tests necessary to provide and maintain an adequate process control system that will provide reasonable assurance that all aggregates or aggregate combinations submitted for acceptance will comply to Contract Document.

Before beginning aggregate production for quality control/quality assurance (QC/QA) projects, submit a proposed Process Control Plan in writing for review by the Engineer or the QC/QA Contractor. Include the sampling and testing frequencies, the sampling locations, the sampling and testing methods and other inspections expected to establish and maintain process control in the plan. If requested, KDOT will make a chart of recommended sampling and testing frequencies for process control available to the Producer.

A process control plan should include procedures for all aggregates produced to determine grading, plasticity index, deleterious substance content, and other properties that may be required by the specification, and to inspect stockpiles for separation, contamination and segregation. These guidelines are considered normal activities necessary to control the production of aggregates or aggregate combinations at an acceptable quality level. It is recognized that, depending on the type of process or materials, some of the activities listed may not be necessary, or other activities may be required. The frequency of these activities is not listed in these guidelines, as they will vary with the process and the materials.

(2) Sampling and Testing. Use the same sampling and testing methods and procedures in process control as those used by KDOT. These Kansas Test (KT) Methods are included in Part V, which is made available to the producer. Part V also includes a Sampling and Testing Frequency Chart for acceptance of materials that producers may wish to use as a guide to develop their process control plan. Producers supplying material for quality control/quality assurance projects have required minimum sampling and testing frequencies that can also be found in Part V.

(3) Test Reports. Maintain a file of all process control tests. Provide copies to the Engineer upon request.

(4) Acceptance Inspection. Acceptance of aggregate will be based on KDOT and/or Contractor tests at the point of usage unless designated otherwise by the Engineer. Aggregate production will also be inspected to determine if aggregates are being produced from deposits, ledges, and beds which meet the specific quality requirements. Aggregates produced from deposits, ledges, or beds that have not been previously approved for quality will be rejected. Remove rejected material from the project stockpile area immediately. Any work incorporating aggregates from sources not approved for quality for that work must be removed and replaced, or otherwise corrected, by and at the expense of the Contractor.

KDOT reserves the right to run any test at any time to determine specification compliance. When test results on aggregates or mineral filler supplements indicate non-compliance with specifications, the Engineer may cause those materials to be rejected and removed from the work site at the expense of the Contractor.

**c. Certification of Aggregates.** Provide the Engineer a certification for each classification of aggregate utilized in a project.

(1) Aggregates Delivered to the Site: Certify each classification of aggregate delivered to a project or product preparation site. Prepare these certifications under the signature of the aggregate producer or their designated representative.

(a) Certify aggregates that are tested at their destination to determine final disposition as to the locations of the deposits from which they were produced.

## 1101 - GENERAL REQUIREMENTS FOR AGGREGATES

(b) Certify aggregates that are tested at their production site to determine final disposition. These certifications state that the aggregates were removed from a KDOT tested and approved stockpile at the production site, or that they were removed from a plant while it was producing aggregate that was in compliance with the applicable specifications.

(2) Aggregates Incorporated into the Project: At locations where aggregates and products that incorporate aggregates are produced for KDOT and non-KDOT use, provide certifications stating that only KDOT tested and approved aggregate were provided for KDOT projects.

(3) Frequency of Certification:

(a) Before the initial delivery of aggregates to a project or product preparation site, provide the Engineer a certification. This certification is to be under the signature of the aggregate producer or their designated representative and states that all aggregates to be provided for the project are in compliance with all the applicable KDOT specifications.

(b) Upon completion of the project, provide certifications as specified in **1101.2c.(1),(2)** to the Engineer. These certifications apply to all aggregates that were delivered to the project or product preparation site and ultimately used in the project.

These certifications are to indicate the approximate quantities in tons or cubic yards of each aggregate delivered to the project and the approximate quantities in tons or cubic yards of each aggregate delivered to the product preparation site and incorporated into a product that was utilized in the project.

(4) Certification Requirement for Chat: Sellers of chat must complete and submit the Chat User's Certificate within 30 days of the date of acquisition. The certification will contain the following information: location of origin of the chat, amount of chat acquired, and a certification that the chat will be used in accordance with the criteria of Chat Rule, 40 Code of Federal Regulations (CFR) Part 278. The certification should be submitted to both the Kansas Department of Health and Environment (KDHE) and to the Bureau of Construction and Materials. If the chat is sold or otherwise transferred to another party, the seller shall provide a copy of the certification to the new owner of the chat. The initial or any subsequent acquirer of chat will maintain copies of the following for a minimum of 3 years: a) a copy of the certification following transmittal to KDHE, and, as appropriate, b) any Synthetic Precipitation Leaching Procedure testing results, or c) any site specific risk assessments.

### 1101.3 TEST METHODS

Test all aggregates in accordance with the applicable methods cited in **SECTION 1115**.

### 1101.4 PREQUALIFICATION

With the exception of Lightweight (expanded shale) Aggregate, aggregates from each source require "Official Quality" testing on samples obtained by an authorized representative of KDOT before use on KDOT projects. These samples are taken from actual production, which may be "pit-run", "crusher-run" or may involve some processing. Approved sources remain approved only if there are no major changes in the production methods or deposit characteristics.

Lightweight (expanded shale) Aggregate must be prequalified. In-state producers wishing to get their product prequalified must submit a written request to the District Materials Engineer for the District in which the production facility is located. Out-of-state producers must submit their written request to the Engineer of Tests. In the request, the producer must specify whether they want the material to be used for Modified Lightweight Aggregate [**subsection 1102.2.e.(2)**] or for Cover Material (**subsection 1109**). Samples will be collected by KDOT and tested for compliance with applicable specifications. Lightweight aggregates that comply with all applicable requirements will be added to a list of prequalified lightweight aggregates maintained by the Bureau of Construction & Materials. Any change in material source, equipment, or process voids the prequalification and a new prequalification will be required.

### 1101.5 BASIS OF ACCEPTANCE

Aggregates from sources approved for the intended use are accepted based on the following:

a. Current official quality test results complying with the requirements of the applicable subsection are on file with KDOT or the aggregate source is named on an applicable Prequalified List (PQL).

## 1101 - GENERAL REQUIREMENTS FOR AGGREGATES

**b.** Results of tests conducted on samples taken at a point or points designated by the Engineer. KDOT reserves the right to re-sample, test and reject any previously accepted aggregate if the Engineer has reason to believe it no longer complies with the Contract Documents.

**c.** Certifications as specified in **subsection 1101.2 c.**