

**2005 - FLY ASH FOR STABILIZATION, MODIFICATION
AND COLD RECYCLE ASPHALT MATERIAL**

SECTION 2005

**FLY ASH FOR STABILIZATION, MODIFICATION
AND COLD RECYCLE ASPHALT MATERIAL**

2005.1 DESCRIPTION

This specification covers fly ash which is suitable for treatment of sub-grade stabilization and modification, and cold recycle asphalt material. Using fly ash to improve strength is the primary benefit for cold recycle asphalt material and sub-grade stabilization. Changing the moisture sensitivity of sub-grade is the primary benefit of modification, however; soil strength improvements are also expected. Fly ash is a finely divided residue that results from the combustion of ground or powdered coal.

2005.2 REQUIREMENTS

a. General. Comply with the physical requirements of ASTM D 5239, paragraph 6.4, and the chemical requirements of ASTM C 618, Table 1, for Class C fly ash. Sample and test production a minimum of once per month for quality control.

b. Fly Ash for Stabilization and Cold Recycle. Do not use fly ash as a substitute for lime. Meet or exceed a compressive strength of 500 psi at 7 days.

c. Fly Ash for Modification. Meet or exceed a compressive strength of 100 psi at 7 days.

d. Storage and Handling. Store and handle fly ash in closed waterproof containers before distribution on the roadway or fill. Other methods of storage and handling are subject to the approval of the Engineer. Partially caked or set fly ash is unacceptable for use.

2005.3 TEST METHODS

Sample the fly ash using KT-29. Test the chemical composition of fly ash in accordance with ASTM C 311. Test physical properties of fly ash by ASTM D 5239, paragraph 6.4.

2005.4 PREQUALIFICATION

New sources, sources that have not been used on a KDOT project within the last 12 months, and sources which have allowed the required monthly reporting of quality control test results to lapse, must be prequalified. Submit certified analyses of the quality control tests completed during the 90 day period immediately prior to the prequalification request. Certified analyses are defined as representative materials tested by a laboratory regularly inspected and certified by the Cement and Concrete Reference Laboratory (CCRL).

Forward the certified analyses and a 2-quart sample to the Engineer of Tests. The sample will be tested in accordance with this specification, and compared to the certified analysis of the quality control test.

If the material satisfies all requirements, the source will be placed on a prequalified list. Monthly results of the producers quality control testing are required to be forwarded to the Bureau of Construction and Materials to maintain status on the prequalified list. Active sources will remain on the prequalified list so long as verification samples and monthly test results comply with all requirements and indicate acceptable quality control.

2005.5 BASIS OF ACCEPTANCE

Prequalification as required by **subsection 2005.4**.

Receipt and approval of a Type C certification as specified in **DIVISION 2600**.