



## Florida Department of Transportation

RICK SCOTT  
GOVERNOR

5007 NE 39<sup>th</sup> Avenue  
Gainesville, Florida 32609

STEPHANIE C. KOPELOUSOS  
SECRETARY

January 20, 2011

This Memo Has Expired

**MATERIALS BULLETIN NO. 01-11**  
**DCE MEMORANDUM NO. 03-11**  
*(FHWA Approved: 01/20/11)*

**TO: DISTRICT MATERIALS RESEARCH ENGINEERS  
DISTRICT CONSTRUCTION ENGINEERS**

**FROM:** Thomas O. Malerk, P.E. Director, Office of Materials  
David A. Sadler, P.E. Director, Office of Construction

Handwritten signatures of Thomas O. Malerk and David A. Sadler.

**COPIES:** Brian Blanchard, Bob Burleson, Chris Richter (FHWA)

**SUBJECT: LOSS OF CRYSTAL RIVER POWER PLANT FLY ASH (FA-01)**

In order to prevent project delays due to the potential long-term loss of fly ash from the Crystal River Power Plant, Concrete Producers providing concrete to Contractors on existing projects may request of the Department to conduct a modified mix approval process. This memorandum will allow placement of a concrete mix prior to receiving formal mix design approval and will only be in effect until this fly ash source is brought back on line, or the substituted mix is formally approved, provided the Contractor/Concrete Producer is willing to assume the risks.

Prior to granting the modified mix approval process, Department personnel must ensure the Concrete Producer does not have available for use a mix of the same concrete class that could be approved for the project. If acceptable mixes of the same class are available, the Concrete Producer must inform the Contractor so that the mix design can be added to the Contractor's Quality Control Plan.

If the modified mix approval process is used, the following requirements must be met:

1. District Materials personnel will ensure the replacement mix contains the same component materials and quantities as the replaced mix and only fly ash substitution is permitted. The new mix must meet the same requirements as the old mix, including yield, plastic and hardened properties. Adjustments to weights according to specific gravity of replacement fly ash chosen will be permitted as long as the replacement mix equals the original mix regarding application and environmental conditions.
2. All materials must be from an approved source.

**MATERIALS BULLETIN NO. 01-11**  
**DCE MEMORANDUM NO. 03-11**  
**January 20, 2011**  
**Page 2**

3. District Materials personnel will submit the replacement mix design to the State Materials Office similar to the material substitution procedure found in MM 9.2.6.8, however a new temporary design mix number will be assigned with the old design mix number referenced in notes.
4. At the first job-site placement of the new mix, for each project, the Concrete Producer's ACI certified technician or the Contractor's QC certified CTQP inspector will cast a minimum of SIX 4x8 cylinders to be tested by the Concrete Producer's ACI or the Contractor's CTQP lab at 3 for 7-day, and 3 for 28-day results. If the producer wants earlier than 28-day design mix approval, then additional cylinder sets of THREE can be fabricated at their discretion. Whenever overdesign strength is reached, the new design mix will be fully approved as a new stand-alone permanent mix for FDOT use. Acceptance cylinders are not to be used for design mix approval process.
5. Using the job-site cast cylinders, follow above procedures to attain formal mix design approval.
6. Ensure the Concrete Producer / Contractor understands he still carries the risk for ensuring plastic and hardened properties are in compliance with the specifications at the time of placement.

This memorandum does not waive any specification requirements but simply allows an expedient means to approve mix designs.

This memorandum serves as a blanket approval to process this change as a no cost specification revision and shall be attached to the work order or supplemental agreement required for its processing.

For questions or discussion of this matter, contact Tom Byron at (352) 955-6686 or Mike Bergin at (352) 955-6666.

TM/DS/tb