

**STATE OF OHIO
DEPARTMENT OF TRANSPORTATION**

SUPPLEMENT 1034 - GGBF SLAG CERTIFICATION

April 15, 2005

1034.01 - Scope

1034.02 - Procedure

1034.01 Scope This supplement outlines the certification process for ground granulated blast furnace (GGBF) slag. Slag certification is the approval method the Department will use for project acceptance of GGBF slag, meeting the requirements of 701.11, without project pre-sampling and testing.

1034.02 Procedure

A. The distributor will request certification of GGBF materials. Make the request to the Office of Materials Management and submit:

1. A letter of certification stating the slag proposed for certification will meet 701.11 specifications, conform to ASTM C989 and be a minimum grade 100.
2. Test data developed over the last year on the grade of slag for which certification is sought.
 - (i) Each grade of GGBF (100 or 120) and each facility must have a separate approval for certification.
 - (ii) Test data may not be required if the Department currently has data on record.
3. Facility's current CCRL inspection report
4. ½ gallon (2 L) samples of each grade of GGBF
5. Completed and Notarized Form included in this supplement holding the State harmless against direct and indirect costs involved in corrective action required due to the inclusion of non-specification slag.

B. The distributor, in requesting certification, agrees to:

1. Submit monthly chemical and physical test data from the manufacturing

facility to the Office of Materials Management.

- (i) The test data must be in tabular format; be the daily production data; be by type; and include all chemical data including chloride ion content in the slag. (Electronic submission preferred)
2. Have their laboratory inspected each inspection tour by the Cement and Concrete Reference Laboratory, U.S. Bureau of Standards. Submit updated copies of the CCRL report and documentation of corrected footnoted items to the Office of Materials Management.
3. Maintain and provide, upon request by the Department, records of production control tests for a period of five years.

C. The Office of Materials Management will approve the requested manufacturing facility for certification upon review of the data, completion of testing of the manufacturer provided sample, and satisfactory completion one (1) round of Department Quality Assurance Testing. The Department will obtain a sample from the manufacturer and perform the Quality Assurance (QA) testing within 30 days of receipt of the manufacturer's certification request. Approval and acceptance of the material will be based on the Department's Quality Assurance sampling and testing of the material. Results of the acceptance testing will be forwarded to the manufacturer within 15 days of testing. If the material meets specification requirements, the material will be approved for use on ODOT projects upon receipt of the approval letter from the Department.

D. The Department will obtain field samples on a frequency of one sample every 180 days per ready mix plant.

1. If any two in a series of ten consecutive field samples fail to meet the requirements of the 701 specification, that grade may be removed from certification. In addition, the Department may take action under 105.11.
2. Slag shipped after removal from certification must be sampled, tested and approved before use.
3. Dispute Resolution – The supplier of the GGBF Slag may request a review for removal from the certification program through the Administrator of the Office of Materials Management. Submit the request in writing within 15 working days of notification of removal, indicate the reason for the appeal and provide supporting documentation. The Department will hold an appeals meeting within 30 days of receipt of the request.

E. Following certification:

1. The slag facility must document each shipment of certified slag with two original bill-of-ladings that contains the statement:

"ODOT Certified GGBF Slag" - In accordance with S-1034
Slag approved for use upon receipt.

The bill-of-lading must also contain the following:

- (i) Grade of slag
- (ii) Manufacturing Source: City & State
- (iii) Shipping origin
- (iv) Quantity
- (v) Consignee and destination
- (vi) Bill-of-lading Number
- (vii) Date

The two copies of the original bill-of-lading shall be left at the destination for the ODOT representative.

2. Upon request the slag facility will furnish an ODOT representative access to those parts of the plant engaged in the testing, storage, and shipment of slag produced for State projects.

F. Failure to comply with the requirements of this supplement or failure to meet test standards may result in removal from the certification.

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_____ hereby requests the following class
(Distributor)
of slag be certified in accordance with the Ohio Department of Transportation Supplement
1034.

Grade 100 _____

Grade 120 _____

The distributor holds the Ohio Department of Transportation harmless against direct and indirect costs involved in any corrective action required due to the inclusion of non-specification slag.

Source Name: _____

Source Contact Person: _____

E-mail Address _____

Source Phone: _____ Fax: _____

Source Plant Address: _____

Source Mailing Address: (if different)

Source e-mail address: _____

To Be Notarized