

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

GUIDE FOR APPROVAL OF SUPPLEMENTARY CEMENTITIOUS MATERIALS (SCMs)

1. PURPOSE

- 1.1 To set forth the Division's approval procedures for Supplementary Cementitious Materials (SCMs) used in portland cement concrete.
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2. SCOPE

- 2.1 This procedure will apply to all SCMs used in portland cement concrete that are used on West Virginia Division of Highways projects.
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3. INITIAL APPROVAL

- 3.1 In order for a SCM to be initially approved for use, the producer of the SCM shall first submit a certified statement to the Materials Control, Soils and Testing (MCS&T) Division that all SCMs shipped to Division projects will conform to the applicable specification requirements. The certified statement shall be signed by a representative of the producer having legal authority to bind the company.
- 3.2 The producer shall also submit, to MCS&T Division, quality control test data on the SCM to be certified. This data shall consist of test results developed from production samples during the last six months. There shall be at least one set of quality control test data for each month in that six-month period. These test results shall include results of all tests that are required by the specifications.
- 3.3 After the Producer has completed Sections 3.1 and 3.2, and if all test data submitted in Section 3.2 meet the applicable specification requirements, a representative of MCS&T Division shall obtain a sample of the SCM from the source of production. The MCS&T Division shall test this sample, and if it meets specification requirements, a representative of the MCS&T Division shall obtain a second sample of the SCM from the source of production or distribution (i.e. terminal). The MCS&T Division shall then test this second sample.
- 3.3.1 If either of the two samples obtained in Section 3.3 does not meet specification requirements, the SCM will not be approved. If, at this time, the producer still seeks Division approval of the subject SCM, a minimum of ninety calendar days (from the date the non-conforming sample was obtained) must elapse before the approval process may begin again (starting with Section 3.1).
- 3.4 If the second sample obtained in Section 3.3 also meets specification requirements, the SCMs will be placed on the Division's approved list and the producer may begin to supply the subject material for use on Division projects.

4. APPROVED LIST

- 4.1 Once each quarter, or any time the list is updated, the MCS&T Division shall provide a list of all currently approved SCMs.
- 4.2 The producer and the District Materials Sections will be notified of any changes in the approved status of a SCM.
- 4.3 No SCM may be used in portland cement concrete that is supplied to West Virginia Division of Highways projects unless it is on the Division's approved list of SCMs.

5. MAINTAINING APPROVED STATUS

- 5.1 In order to maintain approved status of the subject SCM, the producer shall submit test data on a monthly basis in the same manner as described in Section 3.2.
- 5.2 Also, Division representatives from each District Materials Section shall obtain samples of the subject SCM at every point of use (i.e. ready-mix plants, etc.) that is located within their District. A minimum of one sample shall be obtained from each particular location every six (6) months. Within one week of obtaining these samples, the District personnel shall forward them to the MCS&T Division, where they shall be tested.
 - 5.2.1 If any of the samples, obtained by District Personnel as outlined in Section 5.2, fail to meet the specification requirements, personnel from the MCS&T Division shall immediately obtain a sample of the subject material at the source of production or distribution (i.e. terminal). The MCS&T Division shall then test this sample.
 - 5.2.2 If the sample obtained in Section 5.2.1 meets specification requirements, personnel from the MCS&T Division shall obtain a second sample at the source of production or distribution (i.e. terminal). If this second sample meets specification requirements, no further action is required, and the subject source may remain on the Division's approved list.
 - 5.2.3 If either of the samples obtained in Sections 5.2.1 or 5.2.2 do not meet specification requirements, the subject material shall be removed from the Division's approved list.
 - 5.2.4 If, within a twelve-month period, two or more samples obtained as outlined in Section 5.2 (of the same material from the same approved source) fail to meet specification requirements, personnel from the MCS&T Division shall conduct an investigation into the possible reasons for the non-specification material. If the outcome of this investigation indicates a problem with material from the subject approved source, removal of that source from the approved list shall be permitted.
 - 5.2.5 If a SCM is removed from the approved list, it may be reinstated at the discretion of the Division when sufficient sampling and testing (at the source of production or

distribution) has been conducted to ensure that material being produced is once again within the limits of the specifications.

- 5.3 If, in a two-year period, no samples from an approved source of a SCM, as outlined in Section 5.2, are received by MCS&T from the Districts, then that source of SCM shall be considered as inactive, and it may be removed from the Division's approved list of SCMs.
- 5.3.1 If the Division elects to keep an inactive source of SCM on the approved list of SCMs, then MCS&T shall obtain additional samples at that source, as outlined in Sections 3.3 and 3.4.



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Ronald L. Stanevich, P.E.
Director
Materials Control, Soils and Testing Division

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