TO:       REGIONAL ENGINEERS AND HIGHWAY BUREAU CHIEFS
         MANUFACTURERS AND SUPPLIERS OF FINELY DIVIDED MINERALS

SUBJECT:  ACCEPTANCE PROCEDURE FOR FINELY DIVIDED MINERALS USED
          IN CONCRETE AND OTHER APPLICATIONS

1.0       PURPOSE

To establish procedures whereby materials of mineral origin, furnished by a Manufacturer
or Supplier, will be accepted for use on Department projects.

2.0       SCOPE

This procedure is available to all Manufacturers or Suppliers of domestic and foreign
Finely Divided Minerals. However, only Sources in North America may apply for
Approved Source status.

3.0       REFERENCES AND AUTHORITY

3.1       Finely Divided Minerals used on Department projects shall meet the material
          requirements of the Specifications.

3.2       Fly Ash used on Department projects shall meet the standard physical and chemical
          requirements of AASHTO M 295.

3.3       Microsilica used on Department projects shall meet the standard physical and chemical
          requirements of AASHTO M 307.

3.4       High-Reactivity Metakalin used on Department projects shall meet the standard
          physical and chemical requirements of AASHTO M 321, except the fineness shall be a
          maximum 15% retained on the No. 325 (45 \(\mu\)m) sieve.

3.5       Ground Granulated Blast-Furnace Slag used on Department projects shall meet the
          standard physical and chemical requirements of AASHTO M 302, for Grade 100 or Grade
          120 material.

3.6       Blended Finely Divided Minerals used on Department projects shall meet ASTM
          C 1697 and will be classified according to its predominant Finely Divided Mineral
          constituent or as designated by the Manufacturer. Blended Finely Divided Minerals
          shall meet the chemical requirements of its predominant constituent or designated
          classification, and its individual constituent Finely Divided Minerals will not be required
to conform to their applicable standard as long as the blended product meets the chemical requirements of its classification.

3.7 **Dry Expansive Component** used of Department projects shall meet the standard physical and chemical requirements of ASTM C 806. The minimum restrained expansion shall be 0.04 percent at seven days as determined according to ASTM C 806. The maximum restrained expansion shall be 0.18 percent.

3.8 Sampling devices which are not according to ASTM C 311 may be used, if approved by the Department. See Attachment A for current sampling devices approved by the Department, which are not according to ASTM C 311.

4.0 **DEFINITIONS**

AASHTO - American Association of State Highway and Transportation Officials.

ACCEPTANCE (ACC) SAMPLE - A sample used for accepting/rejecting a Finely Divided Mineral prior to use on Department projects and/or as unassigned stock for use on future projects. The quantity represented by acceptance samples must be given.

AGENT - One who acts for or as the representative of a Finely Divided Mineral company.

APPROVED SOURCE - A source that is approved by the Bureau to ship a Finely Divided Mineral for immediate use on Department projects.


BLENDED FINELY DIVIDED MINERAL - a blended finely divided mineral shall be the product resulting from the blending or intergrinding of two or three finely divided minerals. For simplicity herein, the term Finely Divided Mineral will also apply to Blended Finely Divided Mineral products, except when otherwise indicated.

BUREAU - Central Bureau of Materials (CBM), Illinois Department of Transportation.

CCRL - Cement and Concrete Reference Laboratory.

CEMENT - Portland cement.

COMPOSITE SAMPLE - Combined Grab Samples taken at prescribed intervals over a period of time.

DEPARTMENT - Illinois Department of Transportation (IDOT), including its Districts and Central Bureau offices.

DISTRICT - District office, Illinois Department of Transportation.

DRY EXPANSIVE COMPONENT - A Type G or K dry expansive component as defined in ACI 223R. Per Department Specifications, the material is mixed with Type I or II Cement and water to produce a paste that increases in volume and makes shrinkage-compensating concrete. Finely Divided Minerals may also be used in the concrete mixture.
ENGINEER - Chief Engineer of the Department of Transportation of the State of Illinois, or authorized representative as defined in Section 101 of the Standard Specifications.

FHWA - Federal Highway Administration.

FINELY DIVIDED MINERAL - A finely divided material which has cementitious or pozzolanic properties. Examples are Fly Ash, Microsilica (Silica Fume), Ground Granulated Blast-Furnace (GGBF) Slag, High-Reactivity Metakaolin (HRM), and Dry Expansive Component Materials Type G or K. For simplicity herein, the term Finely Divided Mineral will also apply to Blended Finely Divided Mineral products, except when otherwise indicated.

FLY ASH - A finely divided residue that results from the combustion of ground or powdered coal, transported from the combustion chamber by exhaust gas, collected by mechanical or electrical means, and stored in stockpiles or bins.

GRAB SAMPLE - A sample secured from a conveyor, from bulk storage, or from a bulk shipment in one operation.

GROUND GRANULATED BLAST-FURNACE (GGBF) SLAG - A glassy granular material, formed when molten blast-furnace slag is rapidly chilled, and then finely ground.

HIGH-REACTIVITY METAKAOLIN (HRM) - A reactive aluminosilicate pozzolan formed by calcining purified kaolinite at a specific temperature range.

INDEPENDANT ASSURANCE (IND) SAMPLE - A sample used to provide an independent check on the reliability of the Manufacturer's or Supplier's quality control program.

INSPECTOR - The authorized representative of the Engineer assigned to make detailed inspection of any or all portions of the work, material, product, etc., as applicable.

INVESTIGATION (INV) SAMPLE - A destination sample used to verify the acceptability of a Finely Divided Mineral from a Source.

ISO 9000 OR 14000 SERIES - A program of international quality management system standards developed by the International Organization for Standardization (ISO).

MANUFACTURER - A term synonymous with Producer.

MICROSILICA - An amorphous silica of high silica content and purity possessing high pozzolanic activity.

NIST - National Institute for Standards and Technology.

PRELIMINARY (PRE) SAMPLE - A sample used to determine, in advance, if the Finely Divided Mineral will comply with the Specifications.
PROCESS CONTROL (PRO) SAMPLE - A sample used for the purpose of controlling production of a Finely Divided Mineral proposed for incorporation into Department projects.

PRODUCER - An individual or business entity providing materials and/or products such as a Finely Divided Mineral for performance of prescribed work.

REFERENCE MATERIAL - A Cement used for the control mortar and corresponding test mortars, of a Finely Divided Mineral, to determine its strength activity index.

SOURCE - The name and location of the manufacturing process from which a Finely Divided Mineral is obtained.

STATE - The state of Illinois.

SPECIFICATIONS - Specifications for materials; manufactured, fabricated or constructed items; processes; products; designs; conducted test procedures, etc. which includes the Standard Specifications, supplemental Specifications and recurring special provisions, highway standards, shop drawings, contract plans, project special provisions, AASHTO Specifications, ASTM Specifications, etc., as applicable.

STANDARD SPECIFICATIONS - The Department’s Standard Specifications for Road and Bridge Construction.

SUPPLIER - A company that supplies materials or products such as a Finely Divided Mineral that it does not manufacture or fabricate.

UNAPPROVED SOURCE - A source that ships a Finely Divided Mineral which must be sampled, tested, and approved by the Bureau before it is used on Department projects.

5.0 FINELY DIVIDED MINERAL ACCEPTANCE PROCEDURES

5.1 Approval of Finely Divided Minerals for use on Department projects will be according to one of the two procedures outlined in Subsections 5.1.1 and 5.1.2.

5.1.1 Approved Source Procedure. A Manufacturer or Supplier desiring to avoid delays in the sampling, testing, and approval of a Finely Divided Mineral before use on Department projects, may, with Department approval, qualify a Source to ship a Finely Divided Mineral for immediate use. Requirements for this procedure are contained in Section 6 of this policy memorandum. The Bureau will maintain the Qualified Producer List Finely Divided Minerals.

5.1.2 Unapproved Source Procedure. A Finely Divided Mineral from a Source other than an Approved Source will be sampled, tested, and approved by the Bureau for compliance with the requirements in this policy memorandum, before it is used on Department projects. Requirements for this procedure are contained in Section 7 of this policy memorandum.
6.0 APPROVED SOURCE PROCEDURE

6.1 A Manufacturer or Supplier requesting Source approval of a Finely Divided Mineral shall provide the following to the Bureau:

1. The Manufacturer's or Supplier's name and location.

2. The Source name, location (station), and number of generating units. If a Blended Finely Divided Mineral, then Source information for each of its constituent Finely Divided Minerals.

3. The name of the Finely Divided Mineral and its class, grade, or type. If a Blended Finely Divided Mineral, then its predominant class, grade, or type or as assigned by the Manufacturer.

4. A certification that the Finely Divided Mineral meets the applicable requirements of Section 3. If a Blended Finely Divided Mineral, then it shall be certified according to its predominant constituent or designated classification.

5. A 3-month testing history. For a new Source or when the Supplier for the Source is changed, the 3-month requirement is waived and all available test information at the time of application shall be provided.

6. A copy of the Manufacturer's or Supplier's quality control program.

7. A copy of the last CCRL inspection report of the testing laboratory used by the Manufacturer or Supplier of the Finely Divided Mineral, with documentation of resolution of any discrepancies noted therein. The Manufacturer or Supplier of HRM, Microsilica, or Dry Expansive Component shall provide a copy of the testing laboratory's CCRL inspection report and/or an ISO 9000 or 14000 Series certificate. For an alternative quality system program approved by the Bureau, a certificate or other documentation shall be provided.

8. A copy of the Safety Data Sheet (SDS) for the Finely Divided Mineral.

At the time of application, the Manufacturer or Supplier shall obtain a Preliminary (PRE) Grab Sample of the Finely Divided Mineral from current production according to ASTM C 311. However, this shall not apply to Dry Expansive Component. If sampling a Blended Finely Divided Mineral, PRE Grab Samples of each constituent Finely Divided Mineral shall also be obtained. The Manufacturer or Supplier shall split the PRE Sample and place one portion in an airtight container and deliver it to the Bureau. A sample of the Reference Material used by the Manufacturer or Supplier for testing shall be included. The Manufacturer or Supplier shall assume the cost to deliver the samples to the Bureau. The size of the Bureau's portion of the PRE Sample and the Reference Material shall not be less than 6 lb. (3 kg) each and the samples shall be properly identified on form BMPR CM01. The Manufacturer or Supplier shall test the retained portion of the PRE Sample for the standard physical and chemical properties listed in the applicable Specification in Section 3. When all tests are completed, the Manufacturer or Supplier shall complete form BMPR CM20 for Fly Ash, BMPR CM21 for GGBF Slag, BMPR CM22 for Microsilica, or BMPR CM23 for HRM, as applicable, and deliver the test results to the Bureau. For a Blended Finely Divided Mineral, use
the form applicable to the product’s predominant constituent or designated classification, and report each constituents’ results on its applicable form.

The Bureau will test its portion of the PRE Grab Sample with the Reference Material for conformance to Section 3. The Bureau will compare the results obtained by both laboratories to determine compliance with the allowable difference between two laboratories set forth in the precision statement of each test method. Additional split sample testing will be required if the test results obtained on the PRE Grab Sample do not comply with the Specification requirements and this policy memorandum.

At the time of application for Dry Expansive Component, the Manufacturer or Supplier shall submit a report prepared by an independent laboratory inspected by CCRL. The report shall show the results of ASTM C 806 conducted no more than five years prior to the time of submittal. The Dry Expansive Component shall be used in combination with Type I or II Cement. The minimum restrained expansion shall be 0.04 percent at seven days as determined according to ASTM C 806. The maximum restrained expansion shall be 0.18 percent.

An Inspector from the Bureau may conduct a scheduled visit to inspect the laboratory facilities designated by the Manufacturer or Supplier to test the Finely Divided Mineral; the Source manufacturing process, the Source storage facilities; and the quality control policies, procedures, and practices used by the Manufacturer or Supplier. The Manufacturer or Supplier shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the Bureau Inspector if the trip from the Bureau to the Manufacturer or Supplier, the Manufacturer or Supplier inspection, and the return trip to the Bureau cannot be completed within one day’s normal work hours of 8:00 AM to 4:30 PM. Reimbursement for travel costs shall be provided no later than 30 calendar days after receipt of costs submitted by the Department.

The Bureau will notify the Manufacturer or Supplier, in writing, if the request for Approved Source status is granted or denied. A request may be denied if the Manufacturer or Supplier fails to meet the requirements of this policy memorandum, or for other reasons determined by the Department.

6.2 Quality Control Requirements for Approved Sources:

1. The Manufacturer or Supplier shall establish and maintain quality control policies and procedures for sampling and testing that are approved by the Bureau. The Bureau shall be notified of any changes in the Manufacturer’s or Supplier’s quality control program.

2. Testing laboratories used by the Manufacturers or Suppliers of Fly Ash, GGBF Slag, and Dry Expansive Component shall participate in the CCRL pozzolan program of the NIST, which includes inspection of facilities and testing of proficiency samples. As an alternative to the CCRL pozzolan program of the NIST, testing laboratories used by the Manufacturers or Suppliers of GGBF Slag and Dry Expansive Component may participate in the CCRL cement program. As another alternative, testing laboratories used by the Manufacturers or Suppliers of Dry Expansive Component shall have implemented a quality management system based on the ISO 9000 or 14000 Series standards in lieu of participating in a CCRL program. Testing laboratories used by the Manufacturers or Suppliers of Microsilica or HRM
shall participate in the CCRL pozzolan program of the NIST or shall have implemented a quality management system based on the ISO 9000 or 14000 Series standards.

Testing laboratories participating in an alternative quality system program that is not listed in the previous paragraph shall submit details of the program for approval by the Bureau.

6.3 Reporting Requirements for Approved Sources:

1. The Manufacturer or Supplier shall deliver a test report to the Bureau which lists the results of all Grab and/or Composite Samples taken and tested for the specified reporting period.

2. For Fly Ash, the report shall be monthly, and shall be delivered no later than forty calendar days after the end of the month. If the Fly Ash Source is sampling more frequently than once per month according to ASTM C 311, then the report shall be delivered no later than forty calendar days after the end of the composite date. If the deadline falls on a Saturday, Sunday, or State Holiday, the deadline shall be the next work day.

3. For GGBF Slag, HRM, Microsilica, and Dry Expansive Component, the report shall be quarterly and shall be delivered no later than forty calendar days after the end of each quarter. For the purpose of the reports, the quarters shall end March 30, June 30, September 30, and December 31. If the deadline falls on a Saturday, Sunday, or State Holiday, the deadline shall be the next work day.

4. For Blended Finely Divided Minerals, the report shall be according to the above based on the product’s predominant constituent or designated classification.

6.4 Record Requirements for Approved Sources:

1. Records of production control tests shall be maintained by the Manufacturer or Supplier for a minimum period of 5 years and shall be made available to the Bureau upon request.

2. Copies of bills of lading of quantities of Finely Divided Minerals shipped shall be maintained by the Manufacturer or Supplier for a minimum period of 3 years and shall be made available to the Bureau upon request. At a minimum, bills of lading shall contain the following information:
   a. The type of Finely Divided Mineral, including class, grade, etc.
   b. The quantity of shipment.
   c. The date of shipment.
   d. The Manufacturer’s or Supplier’s name.
   e. The Source location.
   f. The shipment’s point of origin, if different from the Source location.
   g. The shipment’s destination.
   h. The consignee’s name.
   i. The bill of lading number.

6.5 Sampling and Test Requirements for Approved Sources:
1. For **Fly Ash**, each February, May, August, and November, the Supplier shall obtain a **Process Control (PRO) Grab Sample** according to ASTM C 311.

For **GGBF Slag**, **HRM**, and **Microsilica**, each January, April, July, and October, the **Manufacturer** or **Supplier** shall obtain a **PRO Grab Sample** according to ASTM C 311.

For **Blended Finely Divided Minerals**, sampling shall be according to the above based on the product's predominant constituent or designated classification. **PRO Samples** of each constituent **Finely Divided Mineral** shall also be obtained.

For **Dry Expansive Component**, **PRO Grab Samples** are not required.

The **PRO Grab Sample** shall be split for testing by the **Manufacturer** or **Supplier** and the **Bureau**. At this time, a sample of the current **Reference Material** used by the **Manufacturer** or **Supplier** for testing shall also be split.

The **Bureau** may require that more frequent **PRO Grab Samples** be obtained and tested. These samples may be requested because of a change in the material, variations in test results between the **Bureau** and **Manufacturer** or **Supplier**, field test results, or other reasons as determined by the **Bureau**.

The **Bureau** samples shall be placed in airtight containers, properly identified on form **BMPR CM01**, and delivered to the **Bureau** no later than the last work day of the month. The **Manufacturer** or **Supplier** shall assume the cost to deliver the samples to the **Bureau**. Each **Finely Divided Mineral** sample and **Reference Material** sample shall not be less than 6 lb. (3 kg).

2. The **Manufacturer** or **Supplier** shall test the retained portion of each **PRO Sample**, using the retained portion of the **Reference Material**, for the standard physical and chemical properties listed in the applicable **Specification** in Section 3. For a **Blended Finely Divided Mineral**, the blended product shall be tested for both its standard physical and chemical properties, while each of its constituent **Finely Divided Minerals** shall be tested for their chemical properties. When all tests are completed, the **Manufacturer** or **Supplier** shall complete form **BMPR CM20** for **Fly Ash**, **BMPR CM21** for **GGBF Slag**, **BMPR CM22** for **Microsilica**, or **BMPR CM23** for **HRM**, as applicable, and deliver the test results to the **Bureau** no later than the last work day of the following month from the date of sample. For a **Blended Finely Divided Mineral**, use the form applicable to the product's predominant constituent or designated classification, and report each constituents' chemical results on its applicable form.

3. The test results obtained by the **Manufacturer** or **Supplier** and the **Bureau** on all split samples will be compared for compliance with the allowable differences for two laboratories set forth in the precision statement of each test method and for compliance with Section 3. If significant differences exist in the split sample test results, the **Department** will investigate sampling and test procedures, or require additional comparative sampling to determine the cause of the variation.
6.6 **Department Inspections of Approved Sources:**

1. An **Inspector** from the **Bureau** may conduct unscheduled visits to each **Approved Source** or one of its terminals. During this visit, the **Inspector** may take or witness the taking of a random **Independent Assurance (IND) Grab Sample** according to ASTM C 311. If a sample is taken, the **Inspector** will split the sample and deliver an equal portion to the **Manufacturer** or **Supplier**. The **Manufacturer** or **Supplier** shall test the retained portion of the split sample for the standard physical and chemical properties listed in the applicable **Specification** with the appropriate **Reference Material**. When all tests are completed, the **Manufacturer** or **Supplier** shall complete form **BMPR CM20** for **Fly Ash**, **BMPR CM21** for **GGBF Slag**, **BMPR CM22** for **Microsilica**, or **BMPR CM23** for **HRM**, as applicable, and deliver the test results to the **Bureau** no later than the last work day of the following month from the date of sample. The **Bureau** will evaluate the test results obtained on the sample by the **Manufacturer** or **Supplier** according to Subsection 6.5.

2. The **Manufacturer** or **Supplier** shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the **Bureau Inspector** if the trip from the **Bureau** to the **Manufacturer** or **Supplier**, the **Manufacturer** inspection, and the return trip to the **Bureau** cannot be completed within one day's normal work hours of 8:00 AM to 4:30 PM. Reimbursement for travel costs shall be provided no later than 30 calendar days after receipt of costs submitted by the **Department**.

3. Random **Investigation (INV) Grab Samples** of the **Finely Divided Minerals** and the project **Cement (Reference Material)** will be obtained according to ASTM C 311 and AASHTO T 127, respectively, at final destination by a representative of the **Department**. The representative will either take or witness the taking of the **INV Samples**. The sampling location and frequency for obtaining **INV Samples** will be determined by the **Bureau** in consultation with the **District** offices.

   The **Bureau** will test **INV Samples** to ascertain the results of **Finely Divided Mineral-project Cement (Reference Material)** combinations. To verify that **Finely Divided Minerals** shipped from **Approved Sources** meet the requirements of Section 3, the **Bureau** may also test **INV Samples** with other appropriate **Reference Material**.

6.7 **Approved Source with Multiple Suppliers:**

In some cases an **Approved Source** will establish contract agreements with various **Suppliers** to sell their product. These **Suppliers** typically will use their own trade name for the product. A **Supplier** who desires to be listed on the **Bureau's approved list** shall have the **Approved Source** provide the **Bureau** a copy of the contract agreement. The **Supplier** and product trade name will be listed as long as the **Approved Source** remains in compliance with this policy memorandum. If the **Approved Source** is removed, the **Supplier** has the option to become approved by meeting the requirements for an **Approved Source**.
6.8 Revocation of Approved Source Status:

1. Failure of a Manufacturer or Supplier to meet the requirements of Sections 3 and 6 of this policy memorandum will be sufficient cause to revoke Approved Source status. The occurrence of three late submittals in a twelve month period for any of the following: test report (Grab or Composite Samples), PRO Sample, or PRO test results; will result in a meeting with the Manufacturer or Supplier. The Manufacturer or Supplier will be given an opportunity to submit a plan for corrective action. Failure to correct the late submittal problem will result in revocation of Approved Source status. A late submittal will be based on the postmark date. If there is no postmark date, a late submittal will be based on date of receipt by Bureau.

2. Failure to resolve significant differences in testing, as indicated by the test results obtained on PRO or IND Samples split with the Manufacturer or Supplier will be sufficient cause to revoke Approved Source status.

3. Failure of the testing laboratory, used by the Manufacturer or Supplier of a Finely Divided Mineral, to satisfactorily resolve the discrepancies noted in the CCRL inspection report, or maintain a quality management system (ISO or alternative quality system program) will be sufficient cause to revoke Approved Source status.

4. Revocation of Approved Source status will be reported to the Manufacturer or Supplier in writing.

5. The Manufacturer or Supplier may re-apply for Approved Source status any time after revocation. However, a minimum of 28 days shall have elapsed from the date of revocation before reinstatement will be considered. The actual date of reinstatement is subject to the determination of the Engineer that the problem or problems have been corrected.

7.0 UNAPPROVED SOURCE PROCEDURE

7.1 A Manufacturer or Supplier requesting approval of a Finely Divided Mineral from an Unapproved Source shall provide the following to the Bureau:

1. The Manufacturer's or Supplier's name and location.

2. The Source name, location (station), and number of generating units.

3. The name of the Finely Divided Mineral and its class or grade. However, the Unapproved Source procedure will not be permitted for Blended Finely Divided Minerals or Dry Expansive Component.

4. A copy of the latest CCRL inspection report and proficiency test results for the testing laboratory to be used by the Manufacturer or Supplier. The testing laboratory may participate in either the CCRL pozzolan or cement program. Otherwise, the Manufacturer or Supplier shall provide documentation for review that shows the testing laboratory has implemented a quality control and management system which is acceptable to the Bureau.
5. A current test report, in English, which indicates that the standard physical and chemical properties of the Finely Divided Mineral meets the applicable requirements of Section 3.

6. The transportation method and location at which an Inspector from the Bureau will be able to obtain Acceptance (ACC) Samples.

7. If requested by the Bureau, the Manufacturer or Supplier shall sample a 24-hr Composite Preliminary (PRE) Sample of the Finely Divided Mineral from current shipments according to ASTM C 311. The Manufacturer shall split the PRE Sample. The Bureau sample shall be placed in airtight containers, properly identified on form BMPR CM01. A sample of the Reference Material used by the Manufacturer or Supplier for testing shall be included. The Manufacturer or Supplier shall assume the cost to deliver the Sample and Reference Material to the Bureau. The size of the Bureau’s portion of the PRE Sample, and the Reference Material shall each not be less than 6 lb. (3 kg).

The Manufacturer or Supplier shall test the retained portion of the PRE Sample for the standard physical and chemical properties listed in the applicable Specification in Section 3 with the appropriate Reference Material. When all tests are completed, the Manufacturer or Supplier shall complete form BMPR CM20 for Fly Ash, BMPR CM21 for GGBF Slag, BMPR CM22 for Microsilica, or BMPR CM23 for HRM, as applicable, and deliver the test results to the Bureau.

The Bureau will test its portion of the PRE Sample for conformance to Section 3 with the appropriate Reference Material. The Bureau will compare the results obtained by both laboratories to determine compliance with the allowable difference between two laboratories set forth in the precision statement of each test method. Additional split sample testing will be required if the test results obtained on the PRE Sample do not comply with the Specification requirements and this policy memorandum.

### 7.2 Sampling and Test Requirements for Unapproved Sources in North America:

1. Finely Divided Minerals from an Unapproved Source will be sampled, tested, and approved by the Bureau before use on Department projects. The Bureau has the option to affix a seal to secure Finely Divided Minerals in storage (e.g. silo, truck, railroad car, or barge) until the Bureau’s testing is completed.

2. Upon arrival of the Finely Divided Mineral to Illinois, an Inspector from the Bureau will obtain Acceptance (ACC) Grab Samples according to ASTM C 311. The Bureau will determine the number of representative samples required. The samples will be split by the Inspector with the Manufacturer or Supplier retaining one portion of each. At this time, samples of the current Reference Material used by the Manufacturer or Supplier for testing shall also be obtained.

3. The Manufacturer or Supplier may request the Bureau to sample the Finely Divided Mineral and Reference Material prior to arrival in Illinois. In the event the request is approved, the Manufacturer or Supplier shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the Department Inspector. Reimbursement for travel costs shall be provided no later than 30 calendar days after receipt of costs submitted by the Department. If the
Department determines that it lacks the resources to accomplish out-of-state inspection, the Finely Divided Mineral may be sampled and tested according to the procedures in Subsection 7.3.

4. **Acceptance (ACC) Samples** will be tested with the appropriate Reference Material by the Bureau and Manufacturer or Supplier according to Subsection 7.1 Item 7 in order for conformance to Section 3 in order to approve the Finely Divided Mineral for use on Department projects.

5. **Random Investigation (INV) Samples** of Finely Divided Minerals may be obtained at final destination by a representative of the Department. The representative will either take or witness the taking of the INV Samples. INV Samples will be Grab Samples and will be taken according to ASTM C 311 for the Finely Divided Mineral and AASHTO T 127 for the Cement (Reference Material). The sampling location and frequency for obtaining INV Samples will be determined by the Bureau in consultation with the District offices. The Bureau will use INV Samples to verify that the Finely Divided Mineral shipped meets the requirements of Section 3.

### 7.3 Sampling and Test Requirements for Unapproved Sources Located Outside North America:

1. At the port of entry, an Agent of the importer shall obtain a Preliminary (PRE) Composite Sample according to ASTM C 311 from each of the vessel’s holds containing foreign Finely Divided Mineral.

   The Agent shall split each vessel hold Composite Sample and mail one portion to the Bureau. The other portion from each vessel hold shall be mailed to the importer’s testing laboratory. At this time, samples of the current Reference Material used by the importer’s laboratory for testing shall also be mailed to the Bureau. The Bureau samples shall be placed in airtight containers, properly identified on form BMPR CM01. The size of the Bureau’s portion of each Composite Sample and the accompanying Reference Material shall each not be less than 6 lb. (3 kg).

2. An Agent of the importer shall obtain a minimum of one Acceptance (ACC) Grab Sample according to ASTM C 311 from each barge of foreign Finely Divided Mineral destined for Illinois. The Agent shall split each barge Grab Sample and mail one portion to the Bureau. The other portion shall be mailed to the importer’s testing laboratory. At this time, samples of the current Reference Material used by the importer’s laboratory for testing shall also be mailed to the Bureau. Sample containers, identification and size shall be the same as that detailed in item 1 above.

3. The importer of the Finely Divided Mineral shall be responsible for all sampling and mailing costs.

4. The importer’s laboratory shall test its portion of each vessel and barge sample for the standard physical requirements of the applicable Specifications.

5. Upon completion of the tests, the importer shall deliver to the Bureau a certification and report that states the Finely Divided Mineral in the vessel unloaded at the port of entry and the Finely Divided Mineral loaded onto each barge destined for Illinois has been tested by the importer with the appropriate Reference Material, and
complies with the applicable Specifications. As part of the report, the importer shall complete form BMPR CM20 for Fly Ash, BMPR CM21 for GGBF Slag, BMPR CM22 for Microsilica, or BMPR CM23 for HRM, as applicable, for each vessel and barge sample tested. The report shall also include for all vessel samples: the name of the vessel, the source of the Finely Divided Mineral, each sample’s hold number, the date the vessel arrived at the port of entry, and the date the sample was taken. In addition, the report shall include for all barge samples: the barge number, the date the sample was taken, and the quantity of Finely Divided Mineral in the barge.

6. The importer shall immediately notify the Bureau if a vessel or barge sample fails to meet the applicable Specification requirements.

7. The Bureau will review the certification and report and compare the importer’s test data to the test data obtained by the Bureau on its portion of each split sample.

8. When the certification and report is examined and determined to be correct, the Bureau will notify the importer and the District offices that the Finely Divided Mineral is approved for state projects.

9. Random Investigation (INV) Samples, from one or more barges, may be taken by a Department Inspector when the barges arrive at the Illinois terminal(s). INV Samples will be Grab Samples and will be taken according to ASTM C 311. At this time, samples of the current Reference Material used by the importer’s laboratory for testing shall also be mailed to the Bureau. The Bureau will use INV Samples to verify that the Finely Divided Mineral meets the requirements of the Specifications.

10. The Department will reject any foreign Finely Divided Mineral tested by the Bureau, or the importer, that does not meet the Specification requirements. For split samples where one party is within Specification and the other party is out of Specification, the Finely Divided Mineral will be considered out of Specification and will be rejected unless the failing test is determined to be flawed by the Bureau.

11. Alternative proposals to the sampling and test requirements stated in this subsection will be considered for Finely Divided Minerals which have an acceptable quality history, and which have previously been approved by the Department. Requests shall be directed to the Bureau for approval.

8.0 ACCEPTANCE OF FINELY DIVIDED MINERALS

8.1 Finely Divided Minerals will be accepted according to the Specifications and this policy memorandum.

8.2 The Bureau will maintain the Qualified Producer List Finely Divided Minerals on the internet, which will indicate the Approved Sources of Finely Divided Minerals that meet the requirements of the Specifications and this policy memorandum. This list will include the name, location, and Producer/Supplier Number of each approved Manufacturer or Supplier of Finely Divided Minerals. Other information as appropriate will also be provided on the list. These Manufacturers or Suppliers may ship Finely Divided Minerals for immediate use on Department projects.
8.3 **Finely Divided Minerals** from **Unapproved Sources** will be approved by the **Bureau** before use on **Department** projects.

9.0 **REJECTION OF FINELY DIVIDED MINERALS**

9.1 A **Finely Divided Mineral** that fails to conform to the requirements of Section 3 of this policy memorandum shall be rejected for use on **Department** projects.

9.2 The **Bureau** will notify the **Manufacturer** or **Supplier** when a **Finely Divided Mineral** is rejected for use on **Department** projects.

10.0 **CLOSING NOTICE**

Archived versions of this policy memorandum may be examined by contacting the **Bureau**.

The current **Bureau** Chief of Materials has approved this policy memorandum. Signed documents are on file with the **Bureau**.
Tube Type
Bulk Sampler