



QUALIFIED PRODUCTS POLICY FOR
FINE AGGREGATE SOURCES FOR USE IN SCDOT PROJECTS
(QUALIFIED PRODUCTS LIST 1)

SCOPE

In general, this policy is set forth to provide guidelines by which fine aggregate sources will be inspected, sampled, tested, and qualified for use in SCDOT projects. These guidelines are not intended in any way to supersede the Department's Standard Specifications, Supplemental Technical Specifications, Supplemental Specifications, Special Provisions, or Construction Manual.

GENERAL

This policy is not intended in any way to imply that the SCDOT will become a prospecting and consulting agency for fine aggregate sources. The responsibility for locating fine aggregate, determining the quality of the material, and developing the source rests solely with the owner. The only interest of the SCDOT is that the best materials available are used in the construction and maintenance of South Carolina's highways.

QUALIFICATION OF FINE AGGREGATE SOURCES

Sources of fine aggregate will be qualified for use by the SCDOT if they meet the following criteria:

- the owner/developer has shown "good faith intent" to properly process and market a good quality product.
- the material meets the quality criteria set forth in this policy.

Qualified sources of fine aggregate will be listed on the SCDOT's Qualified Products Listing (QPL) 1.

The intent of the yearly qualified products list is to identify fine aggregate sources on the basis of (1) the material meeting the quality requirements, and (2) source personnel maintaining gradation controls.

Therefore, appearance on the QPL does not preclude testing of the material immediately before and during use in SCDOT projects. Acceptance testing will be done at the time fine aggregate is incorporated into the work.

Sources of fine aggregate will be removed from the QPL when test results show the material will not meet the quality criteria set forth in the specifications and inadequate processing practices may also be grounds for removal of sources from the QPL. Sources may also be removed if they become inactive in supplying for SCDOT projects. Any sources removed from the listing may be requalified for use in SCDOT work when the cause for removal is corrected.

SOURCE INSPECTIONS

At least once annually, each established fine aggregate source will be inspected. Some sources could be inspected more than once within a year. New sources will be inspected upon receipt of written request submitted to:

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Geotechnical Materials Engineer
SCDOT Office of Materials and Research
PO Box 191
Columbia, SC 29202
(803) 737-6692 • LockmanGM@scdot.org

During the inspection, a qualified representative from the SCDOT Office of Materials and Research (OMR) who is familiar with fine aggregates will meet with the owner/developer or their representative. The following will be accomplished during the inspection:

- Discuss specifications and changes since last inspection.
- Review test results and any problems with material during previous year.
- Discuss owner's/developer's plans for continued operations.
- Inspect pit, processing operations and stockpiles.

During the visit an information card (to be filed at OMR) will be completed. That card will contain at least the following information:

1. Name of the aggregate source and site location.
2. Mailing address.
3. Phone number at which to reach the superintendent or owner.
4. Superintendent's name.
5. Owner or executive to contact and phone number.
6. Manufacturing checklist to identify the source by one or more of the following:
 - a) Banked
 - b) Dredged
 - c) Lightweight
 - d) Manufactured
 - e) Natural
 - f) Processed
 - g) River
 - h) Screened
 - i) Washed
7. Equipment checklist to include:
 - a) Classifier and number of stages
 - b) Dewatering screw(s)
 - c) Washer(s)
 - d) Stacker(s)
 - e) Vibrating screen
 - f) Gradation testing equipment and procedures
8. Directions for locating the fine aggregate source.

SOURCE SAMPLING

At least once annually a sample of fine aggregate will be obtained from each established source by a qualified representative of OMR. Usually, this sample will be taken at the same time the annual inspection is conducted. When deemed appropriate by the Materials and Research Engineer, source samples may be obtained at times other than the annual inspection.

When contacted by an owner or developer of a proposed fine aggregate source, it shall first be determined:

- a.) Whether this is an active source with processing already underway, or
- b.) Whether processing has not yet begun.

In case b, it would not benefit the SCDOT to obtain a sample of material. It is felt that the only truly representative sample that could be obtained would be that obtained from a processed stockpile of material. The exception to this would be a fine aggregate source primarily interested in supplying non-processed bank sand, in which the exposed bank from which production is progressing should be available for obtaining samples. Therefore, undeveloped sources of fine aggregate or sources without stockpiled or processed material should not be sampled until such time as material is processed or stockpiled or an exposed bank is made available. Samples obtained for yearly qualification should represent material already processed and produced for use in SCDOT projects.

After completion of the information card, a representative sample will be taken from the processed or banked material. The representative sample may be obtained from either a bank, stockpile, storage bin, truck or railroad car. The proper sampling procedure is outlined in SC-T-2.

TESTING OF SOURCE SAMPLES

After the sample is obtained it will be submitted promptly to OMR. The sample card will identify the sample as a source qualification sample.

Tests to be conducted on the sample include:

1. Gradation and fineness modulus.
2. Organic matter, colorimetric test, and strength test if darker than 3.
3. Percentage passing the No. 200 sieve.
4. Absorption, percent.
5. Bulk specific gravity, SSD.
6. Soundness at 5 cycles using sodium sulfate, reported as percentage loss (typically tested at varying intervals, ranging from annually to every 5 years.)

Fine aggregates which do not meet the gradation requirements for FA-10, but meet the quality requirements, will be permitted for use in concrete in blends with other qualified fine aggregates as long as the composite mixture meets the gradation requirements.

SCDOT contact:

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