

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

QUALIFIED PRODUCT POLICY FOR TEMPORARY CONCRETE BARRIER PRODUCERS

1.0 General:

As prescribed in the **Subsection 605.2.3.2** of the SCDOT Standard Specifications, temporary concrete barriers used on SCDOT construction projects must be listed on Qualified Product List (QPL) 54. This policy outlines the requirements for inclusion on this QPL.

The SCDOT Office of Materials and Research (OMR) will qualify producers of Temporary Concrete Barriers biennially. Qualification of a producer does not imply acceptance of the actual product; the SCDOT or its agents may reject barrier not meeting all applicable requirements.

2.0 Initial:

- 2.1 All barriers must undergo crash tests to determine if the barriers meet the Manual for Assessing Safety Hardware (MASH) requirements. Therefore, the SCDOT will not qualify a design without an acceptance letter from the Federal Highway Administration (FHWA). Additionally, the FHWA letter does not guarantee or require the SCDOT to accept the design.
- 2.2 Prior to a site visit by an SCDOT inspector, the producer shall furnish the following information to the Structural Materials Engineer at the address given below:
 1. A brief quality control plan listing at least the following items:
 - a. The person(s) responsible for issues involving material quality.
 - b. The physical location of the plant.
 - c. The expected frequency of compressive strength testing for concrete.
 - d. The material certification(s) to be received for steel and other items
 - e. The type and location of retained quality documentation. It is expected that quality documentation will be retained for a period of at least 12 months after production.
 2. A concrete mix design conforming to the requirements of the current SCDOT standard specifications for Class 3000 concrete. This mix design shall indicate the sources of supply for all materials and must use qualified sources for cement, other pozzolans (if applicable), and fine and coarse aggregates.
 3. Certification from the steel supplier(s) indicating that the steel items used in the barrier conform to the requirements shown on the plans.

4. A notarized certification from a company officer indicating that the barrier produced for this purpose will be made from qualified materials and conforms to all applicable requirements
5. If barriers are to be produced according to a design other than that shown in the SCDOT Standard Drawings, a copy of the drawings to be used must be submitted for review and should be accompanied by the following:
 - a. An acceptance letter for the alternate design from the FHWA.

2.3 Once the information has been satisfactorily reviewed, an inspector from the SCDOT OMR will perform a site visit. The following items shall be provided for the inspector's review:

1. At least two completed sections of barrier with all applicable markings (except qualification date and manufacturer code, if unassigned) joined as shown on the plans.
2. A steel reinforcement assembly and other reinforcing items for measurement and inspection.
3. All forms. Forms must be clean of old concrete and serviceable.
4. Any on-site concrete production facilities used to produce material for these barriers, if a qualified ready-mix producer does not produce the concrete. A qualified producer included on the most recent version of QPL 28 must supply ready-mixed concrete if provided from off-site.
5. Any on-site laboratory facilities used to cure and test concrete strength specimens. Devices used for strength testing of cylinders must show evidence of current (annual) calibration.

2.4 Pending successful inspection, the SCDOT Structural Materials Engineer will inform the producer of his product's code and date of qualification and add the producer to the QPL 54.

3.0 Renewal of Qualification:

Approximately 45 days prior to expiration, a producer may reapply to be qualified by providing the information required in **Subsection 2.2, Paragraphs 1 and 2**. In addition to the items listed above for inspection, the retained quality documentation from previous production shall be available for review by the SCDOT inspector, if requested.

4.0 Revocation of Qualification:

Subsequent to being qualified, if a supplier is found to have provided materials substantially not in conformance with SCDOT requirements or the documentation provided for initial qualification and/or renewal of qualification, the Department, at its sole discretion, may elect to remove the supplier from QPL 54. Such revocation will be provided in writing from the SCDOT Structural Materials Engineer. To regain

qualification, the producer must reapply and indicate, in writing, the steps that have been taken to correct any problems that led to the revocation no sooner than 90 days after the date of revocation. The producer will further indicate what actions have been taken to prevent the problems from occurring in the future. Pending successful review and inspection, the producer may be returned to the current qualified product list.

5.0 Contact:

Questions and correspondence regarding this policy, as well as submissions for qualification and renewal of qualification for QPL 54 should be directed to:

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Questions regarding barrier design and drawing acceptance can be directed to

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