

**Tennessee Department of Transportation  
Division of Materials and Tests**

**Materials Exceptions for Alternative Delivery Projects (SOP 1-9)**

Purpose: The purpose of this document is to establish the procedures and **minimum** qualifications/requirements for the acceptance, certification, and verification of materials/products used on Tennessee Department of Transportation (TDOT) Alternative Delivery Projects that do not fall within TDOT's Approved Producer Quality Assurance Program (APQAP) or the Qualified Products List (QPL). As Alternate Delivery Projects are intended to foster innovation, the use of nonstandard materials/products may be of benefit for the Department. This document will provide the requirements to request the use of these products and outlines how the Department will review and approve this request.

Background: This Materials and Tests (M&T) Division's Standard Operating Procedure (SOP) grants a variance as agreed upon by M&T and the Project Manager to supersede the standard procedures and/or guidelines for nonstandard materials/products requested to be used on Alternative Delivery Projects.

[Federal Law \(23 CFR 637\)](#) requires each state develop a quality assurance program which assures all materials and/or products on all Federal-aid highway projects conform to the requirements of the approved plans and specifications. In addition, these procedures assure projects using State funds will also be constructed using approved materials/products.

Policy: All materials/products used on TDOT projects must be accepted **prior to use**. Acceptance of materials is by one of the following:

- Producer List pre-approval and testing of materials/product and/or its components (e.g., aggregate quality, reinforced concrete pipe, corrugated metal pipe, etc.)
- The QPL with certifications (e.g., sign sheeting, erosion control blankets, pavement marking materials, patching material, etc.)
- Submitted request to use alternate materials/products not covered in current specifications or procedures **prior** to placement as laid out in this document.

## 1. Submittal of Request for Materials Exception

For consideration of nonstandard materials/products, the Alternative Delivery Project Manager shall submit to the TDOT Materials & Pavements Manager the following for the material/product:

- Explanation of intent to use alternate materials/products
- Type of material or product not meeting current specification or procedures
  - Difference of materials/products proposed
  - Benefit of proposed materials/products
- History of material/product, (list of projects utilizing, date of usage, quantity, etc.)
- Manufacturer's Certification and Recommendation of placement/usage
- Submittal of contract documentation:
  - Standard/Alternate Drawings, Plans, Specifications, mix designs (using local materials to the extent possible), etc. documenting how the materials/product is to be utilized in the project.
  - Proposed Quality Control Plan for use on the project (See part 2 for requirements)
  - Proposed method of Acceptance (see part 3 for requirements)

The time allowed for the initial review shall not exceed fourteen (14) days. Based on this review M&T will provide a risk and benefits analysis of the proposed material/product back to the Alternative Delivery Project Manager, as well as the recommended Materials Exception. Based on this analysis, the Alternative Delivery Project Manager with concurrence from the Regional Manager of Alternative Delivery will accept or deny the use of the materials/product on the project.

If utilizing the materials/product is accepted by the Alternative Delivery Project Manager, the Materials Exception will become effective. The Materials Exception will include the approved contractor's Quality Control Plan (see part 2) and approved Acceptance Plan (see part 3). The approved Materials Exception will become Project Specific Special Provision and incorporated into the contract or included as a condition for use in an ATC.

The Materials Exception only applies to the specific project and does not become approved on other projects.

## 2. Quality Control Plan Requirements

The Quality Control Plan (QCP) shall identify the proposed testing and frequency needed by the Contractor to properly assure that a quality product meeting all requirements has been properly produced. Where possible, testing and frequency should closely match those of similar materials as listed in [SOP 1-1: Quality Assurance Program for the Sampling and Testing of Materials and Products](#).

Additionally, the QCP shall include information related to the constituent materials such as, but not limited to:

- Buy America Statement
- Build America, Buy America
  - All applicable materials in accordance with [SOP 1-8: Build America, Buy America \(BABA\) Requirements](#)
- List of all material/product suppliers and their location
- Quality Control testing procedures and records
- Detailed marking, (i.e., Stamping/Stenciling for a precast product) (if applicable)
- Batching tolerances and field quality control criteria (if applicable)
  - Tickets/Records of batches

All Quality Control Testing shall be done by the contractor or subcontractors in efforts to control the process of the work. The Contractor shall keep reports documenting all testing for incorporated materials/products. The report shall identify all the applicable information as stated in this document and results of all testing. All quality control records shall be provided to the Department at the time of incorporation into the project. The Department will not base payment on the QC tests but may consider them if Acceptance results are disputed. If no QC test results were documented, then the contractor shall accept the Department's Acceptance Results.

### **3. Acceptance Plan Requirements**

The Acceptance Plan shall layout the method in which the Department or representative shall sample, test, or otherwise evaluate the material/product for acceptance to be incorporated into the work. The proposal shall include a proposed testing method. As close as possible utilize standard AASHTO or ASTM tests. If no AASHTO/ASTM test method exist a product specific test method may be utilized. If changes are required from an established test method an explanation of the changes and reasoning is required. If specialized testing equipment is necessary, the Department may require the Contractor to provide testing equipment for the duration of the project.

The Department will review the proposal and make any necessary revisions prior to approval of the Acceptance Plan. Once approved, the acceptance testing of the material/product shall be performed by the test method and at the frequency agreed to in the Acceptance Plan. Whenever possible the Department will utilize testing frequencies for nonstandard materials/products most similar to those listed in [SOP 1-1: Quality Assurance Program for the Sampling and Testing of Materials and Products](#).