

Georgia Department of Transportation
Office of Materials and Research

Standard Operating Procedure (SOP) 37

Inspection of Thermoplastic

I. General

This Standard Operating Procedure presents an outline of the responsibilities of thermoplastic producers intending to furnish thermoplastic for use in work being performed under the auspices of this Department and the duties of Department personnel assigned to perform the inspection.

It is a function of the Inspection Services Branch of the [Office of Materials and Research](#) to randomly inspect and sample thermoplastic in order to determine if the manufacturer is in conformance with governing Specifications. In order to facilitate the accomplishment of this task, routine thermoplastic plant inspections and field sampling on a random basis will be performed to insure the quality of the thermoplastic material. The [Office of Materials and Research](#) publishes a list of all thermoplastic producers which have qualified under the program set forth in detail in this Standard Operating Procedure. This list is identified as [Qualified Products List \(QPL\) 46B, "Thermoplastic Producers"](#).

II. Producer's Certification

A. Application for Plant Approval

A thermoplastic producer who wishes to furnish material to Department of Transportation projects must submit written application for plant approval to the Inspection Services Branch of the [Office of Materials and Research](#). The application must be submitted each year and include at least the following information.

1. The company name, plant address, names of the principal officers of the company, names of the plant manager, production superintendent, and certified thermoplastic technician.
2. An outline of the company's quality control program. This should include:
 - a. A brief description of the equipment used to test thermoplastic and all tests performed to insure quality of thermoplastic including all generic raw materials used to produce a uniform product, which meets Specification requirements.
 - b. The manufacturer shall submit annual material safety data sheets for generic raw materials and finished thermoplastic.

B. Yearly Guarantee

In addition, the producer shall submit a notarized [Yearly Guarantee](#) stating that all thermoplastic material furnished for use on Department of Transportation, State of Georgia projects are warranted to meet all requirements of the governing Plans and Specifications. A "[Yearly Certification and Guarantee](#)" is attached for your completion and submittal to the Department.

The guarantee must carry the notarized signature of a responsible officer of the company with authority to bind the company to contract.

The certified technician must submit a notarized [yearly guarantee letter](#) as well. Both formats are attached for your completion and submittal to the Department.

Applicants for thermoplastic plant approval must schedule an initial inspection with the Department. This inspection will include a review of the quality control techniques, quality control records and testing equipment. Provided the results of the initial inspection indicate an ability to consistently produce uniform thermoplastic which conforms to the Specifications and provided the plant has a certified thermoplastic quality control technician approved by the Department, the plant will be accepted to produce thermoplastic for the Department.

III. Producer's Responsibilities—General

A. Quality Control

Each producer listed on [Qualified Products List 46B](#), shall have an approved materials control program that insures that all raw materials used in the manufacturer of thermoplastic will meet the governing Specifications.

Each producer is required to perform quality control testing on each truckload of thermoplastic to ensure that the product will meet the governing Specifications. Each producer must have the equipment necessary for securing quality assurance samples of finished thermoplastic material taken by the Department.

Each bag of thermoplastic shall be legibly stenciled with the batch number and date of manufacture.

Each shipment of thermoplastic shall be free of damage. Care should be exercised to ensure that palletized thermoplastic does not collect moisture due to weather and humidity.

B. Certification of Technician

Personnel selected by producers to be certified thermoplastic quality control technicians shall establish their qualifications and proficiency by successfully completing written, oral and/or on-the-job examination prescribed by the [Office of Materials and Research](#).

Application for examination shall be in writing and directed to the following address:

Georgia Department of Transportation
Office of Materials and Research
Inspection Services Section

**15 Kennedy Drive
Forest Park, GA 30297-2599**

C. Technician's Responsibilities

The thermoplastic quality control technician's responsibilities shall include supervising the plant's quality control program. The technician will take appropriate action to insure that all quality control testing is performed in accordance with the governing Specifications.

In addition, to insure the Department that each shipment of thermoplastic produced for Georgia Department of Transportation usage meets all governing Specifications, the technician shall personally inspect each shipment and reject any thermoplastic which is damaged or fails to meet the requirements. For statewide maintenance contract shipments, the technician shall personally place an approved stamp on each top corner on all four sides of every pallet of thermoplastic. For general contractor shipments, the technician shall personally place an approval stamp on each bag of thermoplastic. This Certified Thermoplastic Technician (CTT) stamp will be issued to the technician and shall remain the property of the Department. Alternative methods of approval markings may be endorsed at the discretion of the [Office of Materials and Research](#).

The Department reserves the right to revoke the privileges of the Certified Thermoplastic Technician at any time he/she fails to provide proper assurances that he/she is operating in accordance with this procedure, or when confidence is lost in the technician's capability to perform the duties as outlined.

A technician may be placed in a "Special Control" status in lieu of revocation whenever GDOT feels that the technician is experiencing temporary problems with performance of quality control and approval duties. If this occurs, the technician will be notified of his/her status and corrections must be made and satisfactory practices must be strictly adhered to for 30 calendar days. GDOT will inform the technician of the conditions under which he/she must operate during the interim period. A technician can only remain on "Special Control" for 30 calendar days, after which he/she must have shown satisfactory performance or have privileges revoked indefinitely.

IV. Office of Materials and Research Responsibilities

The [Office of Materials and Research](#) will monitor each producer's quality control procedures. This will include a review of the records of production, shipment, material control, testing, certification, and inspection. In addition, the Department shall randomly perform tests, visually inspect, and sample thermoplastic approved by the technician at the producer's facility. Random inspections and sampling shall also be conducted on thermoplastic shipped to the Department or its registered contractor. The [Office of Materials and Research](#) will provide each producer with a copy of all test reports for any samples randomly selected.

V. Reporting

All plants shall comply with the approved system of reporting each shipment of thermoplastic to a Department of Transportation Maintenance facility or registered contractor's facility. Each shipment shall be reported on a [thermoplastic shipment form](#). These reports shall be submitted to the [Office of Materials and Research](#) within

Standard Operating Procedure (SOP) 37

one week of delivery. The certified thermoplastic technician shall complete this form and certify the shipment date to be correct. In addition, all shipment forms must be accompanied by certifications, which state actual test data for the thermoplastic shipment.

The [Office of Materials and Research](#) will review each report and if the information furnished is complete and correct, the reports will be distributed as part of the documentation for material approval.

VI. Removal of Plants from the Qualified Products List

The State Materials and Research Engineer will remove any producer from the approved list due to failure to comply with any of the requirements of the governing Specifications, as well as failure to comply with any of the requirements in "Laboratory SOP 37."

The protocol for removal from the [Qualified Products List](#) during the calendar year shall be as follows:

First deviation – Verbal quality control warning.

Second deviation – Written quality control warning to company president and initiation of a 60-day probation period.

Third deviation – Removal from the [Qualified Products List](#) for a period of no less than 60 days. During this period, the producer shall not be allowed to make shipments of thermoplastic to be used on any State or Federal funded projects.

VII. Reinstatement to Qualified Products List

Once removed from the approved list, a producer may gain reinstatement after 60 days in the following manner:

A. Request for Reinstatement

The producer shall make a written request to the State Materials and Research Engineer asking to be reinstated to the approved list. The request should address the causes, which affected removal from the approved list. The producer should state measures taken to upgrade their quality control in the production of thermoplastic material. A detailed quality control program must be submitted listing the type and frequency of tests proposed to control the plant and name of the qualified testing technician responsible for the program.

B. "Special Control" Status

If the submitted quality control program is approved, the producer will be placed on "Special Control." This status will last for a period of ten production days. During this period, the producer will report their quality control results to the Inspection Services Branch Chief on a daily basis. In addition, the producer's quality control efforts may be monitored by plant inspections during this time.

C. Reinstatement

If the producer's quality control is adequate and the State Materials and Research Engineer finds the producer meets the requirements for approved plants, the producer will be reinstated to the approved list.

Georgene M. Geary, P.E.
State Materials and Research Engineer

Glenn W. Durrence, P.E.
Director of Construction

Annual Guarantee

This is to guarantee that all _____ (Type of Material) furnished to State of Georgia projects by _____ (Company Name and Location) _____ during the next twelve (12) months will meet the appropriate governing requirements of the Georgia Department of Department of Transportation Specifications. I further warrant that material furnished to State of Georgia projects will be replaced without cost to the purchaser and State of Georgia when found not in conformity with any of the specified requirements. I accept full responsibility for determining the governing Specifications and details which apply to each other.

I _____ (Typed Name) do hereby affirm that as _____ (Official Title) I am legally responsible to bind said organization to the above warranty and certification.

Signed _____

Date _____

Notary Public _____

Standard Operating Procedure (SOP) 37

Date _____

Inspector's Yearly Certification and Guarantee

_____ (Inspector's Name) guarantees that all _____ (Type of Material) stamped and furnished to State of Georgia projects in the forthcoming twelve (12) months will be in accordance with and will conform fully to the requirements of the governing Specifications. I certify that I accept full responsibility for determining the governing Specifications for each order and further certify that all materials furnished will meet the Specifications and details which apply to each order (see note below).

Very truly yours,

(Company Name)

(Plant Location)

(Inspector's Signature) (Date)

(Inspector's Name)

Standard Operating Procedure (SOP) 37

(Notary Public)

(Date)

NOTE: Failure to comply will result in loss of company certification and the right to supply materials for use on Georgia Department of Transportation projects.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF MATERIALS AND RESEARCH**

THERMOPLASTIC SHIPPING REPORT

Statewide Contract # _____ Contractor Lot # _____

Manufactured By: _____ Location _____

Contractor _____ Date Shipped _____

Type						
Color						
Batch Number						
Quantity						
Date Manufactured						
CTT #						

I certify the material covered by this report was manufactured to comply with the Department of Transportation, State of Georgia Standard Specifications Section 653. I further certify that the material herein has been subjected to the required testing and inspection as evidenced by the above noted Certified Thermoplastic Technician (CTT) number stamped on all thermoplastic shipped. A copy of actual certification test data is attached and remains on file in our office.

Inspector Signature

Subscribed and sworn to before me, this _____
day of _____, 20_____

Notary Public

