Laboratory SOP 12 Revised July 1, 2003

# **Georgia Department of Transportation**

**Office of Materials and Research** 

# Standard Operating Procedure (SOP) 12 Inspection of Corrugated Metal Pipe

# I. General

This Standard Operating Procedure provides a means whereby qualified corrugated metal pipe producers can utilize certified personnel to fulfill material inspection requirements.

Each producer must qualify under the acceptance requirements set forth herein. Approved plants are those with a Department approved quality control program, a certified metal pipe technician, and an acceptable record of production. The <u>Office of Materials and Research</u> publishes a list of all plants which have qualified under the program in accordance with this Standard Operating Procedure. This list is identified as <u>Qualified</u> <u>Products List (QPL) 56, "Corrugated Metal Pipe"</u>.

# **II.** Acceptance Requirements

### A. Request for Plant Approval

Corrugated metal pipe producers must submit written application for plant approval to the <u>Office of</u> <u>Materials and Research</u> Inspection Services Branch. The application must be submitted each year and include the following information:

- 1. The company name and plant address, names of the principal officers of the company, the plant manager, production superintendent, and the certified metal pipe technician.
- 2. An outline of the company's quality control program. This includes a brief description of the machinery, equipment, and materials which will be used to manufacture, inspect and test the product.

### B. <u>Yearly Guarantee</u>

In addition, the producer will submit a notarized yearly guarantee stating that all metal pipe and appurtenances furnished for use on GDOT construction projects are warranted to meet all requirements of the governing plans and specifications. A "<u>Yearly Certification and Guarantee</u>" 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.

Applicants for plant approval must schedule an initial inspection with the Department. This inspection will include a review of the quality control techniques, records and equipment.

## III. Producers Responsibilities—General

### A. Certification of Technician

Personnel selected by producers to be certified metal pipe technicians shall establish their qualifications and proficiency by successfully completing written or oral and on-the-job examinations prescribed by the <u>Office</u> <u>of Materials and Research</u>. Applications for examination shall be in writing and directed to the following address:

Georgia Department of Transportation Office of Materials and Research Inspection Services Branch 15 Kennedy Drive Forest Park, Georgia 30297

#### **B.** Technician's Responsibilities

- 1. Supervise the plant's quality control program.
- 2. Certification of Heat Numbers

The technician will check heat numbers of the material with corresponding certified mill test reports and assure that they are in compliance with specifications.

3. Dimensions

The technician will check all dimensions and thickness for compliance with specifications.

4. Protective Coatings

The technician will check metallic coatings and bituminous coatings for compliance with specifications.

- 5. Workmanship
  - a. Inspect the integrity of all seams. Pipe smaller than 24 in (600 mm) in diameter will not be accepted with a butt splice. Splices must be prepared and damaged galvanized coating repaired by an approved method on interior and exterior surfaces.
  - b. Check for damage of metallic coating.
  - c. Check for dents or bend in the metal.

# **IV. Approval**

#### A. Plain Corrugated Metal Pipe

All corrugated metal pipe that does not require an additional bituminous coating will be inspected prior to shipment. Each corrugated metal pipe and/or appurtenance will have an approved numbered Certified Metal Pipe Technician (CMPT) tag attached as evidence of a completed acceptable final inspection.

#### B. Bituminous Coated Corrugated Metal Pipe

All corrugated metal pipe that requires a bituminous coating will be inspected prior to being coated. Pipe in compliance with the Specifications may then be bituminous coated. If the coating is in compliance with the specifications, each piece will have an approved numbered CMPT tag attached as evidence of a completed final inspection.

### V. Office of Materials and Research Responsibilities

The <u>Office of Materials and Research</u> will monitor each plant's quality control procedures. Inspectors will be assigned to review the records of shipments, materials control and product testing records. In addition, inspectors will perform test and visually inspect material that has been approved by the plant's certified technician. The <u>Office of Materials and Research</u> will provide the plant with a copy of all test results for any samples secured at that plant and these copies shall also become a part of the plant's records.

### VI. Reporting

All plants shall comply with the approved system of reporting each shipment of material to a GDOT construction project. Each shipment shall be reported to the <u>Office of Materials and Research</u> on Form DOT-291 within one week of shipment. Authorized plant personnel shall complete this form and certify the information shown to be correct. Certified mill test reports representing all items listed will be attached to Form DOT-291.

The <u>Office of Materials and Research</u> will review each report for accuracy and maintain these reports in the Inspection Services Branch.

### VII.Removal of Plants from Qualified Products List (QPL) 56

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, plan drawings and standard drawings, as well as failure to comply with any of the requirements in this Standard Operating Procedure.

### **VIII.Project Acceptance of Metal Pipe**

The Engineer may accept material from plants listed on <u>Qualified Products List (QPL) 56</u>, providing that each section of pipe has a numbered CMPT tag affixed and shows no signs of damage due to shipping or handling.

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

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

This is to guarantee that all	
(Type of Mate	erial)
furnished to State of Georgia projects by	
(Company Na	me and Location)
during the next twelve (12) months will meet the appropr	iate governing requirements of the Georgia
Department of Transportation Specifications. I further wa	rrant that material furnished to State of Georgia
Projects will be replaced without cost to the purchaser an	d State of Georgia when found not in conformity
with any of the specified requirements. I accept full response	nsibility for determining the governing
Specifications and details which apply to each order.	
I further warrant that all steel products shipped to Georgia from domestic steel and iron and that no foreign billets ar products.	
I do hereby affirm that as	
(Typed Name)	(Official Title)
of	I am legally responsible to bind
(Company Name)	
said organization to the above warranty and certification.	
	Signed
	Date
Notary Public	
Date	