Laboratory SOP 31 Revised: July 20, 2022

Georgia Department of Transportation Office of Materials and Testing

Standard Operating Procedure (SOP) 31 Inspection of Treated Timber Products

I. General

The Inspection Services Branch of the Office of Materials and Testing is responsible for administering the Department's timber inspection program to assure that treated timber used on highway projects conforms to Specification requirements both before and after treatment. The inspection will be conducted prior to, during, and after treatment. The inspection will be conducted, at no cost to the Department, by a third-party inspection agency accredited by the American Lumber Standard Committee (ALSC) or a Department approved commercial inspection agency. When timber is manufactured at one plant and shipped to another plant for treatment, the inspection prior to and after treatment will be at the treatment plant. All costs associated with the third-party or Department approved commercial inspection agency shall be borne solely by the treatment plant.

Acceptable timber will be hammer stamped in "white" prior to treatment and again after treatment on the opposite end. The hammer stamps used must be numbered so as to identify the inspector and there must be a distinct difference between the stamp used before treatment and the one used afterward.

It is expected that all timber inspected and approved under these provisions will be utilized in Department work.

A list of approved wood preserving plants will be published by the Office of Materials and Testing identified as Qualified Products List (QPL) 50, "Approved Wood Preserving Plants".

II. Applicable Documents

Prior to being placed on the List of Approved Wood Preserving Plant the authorities of the treating plant shall have copies of and be familiar with the following documents:

Georgia DOT Specification Sections 859.2.04, 860, 861, 862, and 863

AASHTO M133

AWPA Standards as applicable for the type of timber being treated

III. Qualified Products List Approval

A. Application

Treatment plants covered under this procedure furnishing products for use in GDOT highway construction shall submit the following documentation as outlined below:

- 1. A written request to be considered for inclusion on QPL-50. This shall include:
 - a. The company name, plant address and telephone number
 - b. Names of the principal officers of the company, names of plant manager, plant engineer, production superintendent, quality control supervisor, etc.
- 2. A Quality Control Plan outlining the company's quality assurance/control program in accordance with AWPA M3 or documentation of ongoing participation in an ALSC accredited third-party inspection agency's quality control program in accordance with applicable AWPA Standards. The plant shall update the Quality Control Plan annually, and any time there is a significant change in personnel, production, materials, or Quality Control Procedures.
- 3. A notarized Annual Guarantee letter stating that all treated timber and wood products furnished for use on Georgia Department of Transportation projects are warranted to meet all requirements of the governing Plans and Specifications. The Annual Guarantee(s) must carry the notarized signature of a responsible officer of the company

with the authority to bind the company to contract. This letter will be provided by the Department after receiving written request.

- 4. Plants located outside the boundaries of the State of Georgia shall provide a letter stating that the company agrees to reimburse the Department for the actual cost of travel, subsistence, and extra expense incurred by the Department in the execution of the plant inspection and any subsequent inspection that may be necessary to complete the initial plant certification process. All costs are in accordance with the current Federal Per Diem and Mileage reimbursement rates.
- 5. All Application information shall be submitted and directed to the following address or email:

Georgia Department of Transportation Office of Materials and Testing Inspection Services Branch 15 Kennedy Drive Forest Park, Georgia 30297 InspectionServices@dot.ga.gov

- 6. A plant inspection will be scheduled only after all required documents have been received, reviewed and determined to be acceptable. The plant will provide and equip a laboratory with all necessary supplies and equipment to analyze the preservatives, perform assays and to conduct other test required in AWPA M2. Certifications of accuracy of all recorders, thermometers, gauges and scales, as required in AWPA M3, must be available for review by Department inspectors.
- 7. The plant may be certified to perform work for the Department and added to the approved list, QPL-50, after all requirements have been met and approved, including:
 - a. The results of the plant inspection indicate an ability to consistently furnish uniform products which conform to the Specifications and Plan drawings.

B. Plant Re-Qualification

- 1. Approved plants shall be re-qualified annually.
- 2. At the time of re-qualification, the plant shall submit the documentation outlined in Section III.A of this procedure.
- 3. Annual certification renewal application shall be submitted no later than December 1 of each year to remain an approved source for the following calendar year.

C. Removal from the Qualified Products List

When a plant is found to be lacking in quality control or when the Department loses confidence in their ability or intention to supply satisfactory treated timber, the plant will be removed from the Qualified Products List. Reinstatement to the Qualified Products List will not be allowed until the Department is convinced that the plant will comply with all applicable requirements.

IV. Inspection Prior to Treatment

All timber must be manufactured, graded, and ready for treatment at the time of the inspection. It will be stacked in lots easily accessible to the inspector. A lot will normally represent the amount of timber required for one charge in the treating cylinder. Inspection prior to treatment will be to determine whether the timber is in conformance with the applicable Section of the Specifications. If 3% or less of the pieces fail to meet specifications for any one defect or 5% or less for all defects the lot may be accepted provided the failing pieces are removed from the lot and are replaced by satisfactory materials. When more than 3% of the timber fails for any one defect or more than 5% fails for all defects the inspection will be terminated and the lot rejected until the producer calls and removes the unsatisfactory pieces in the entire lot and replaces them with acceptable material. The lot will then be subject to the same sampling and inspection procedures as for the original inspection. The inspector will mark each acceptable piece in each acceptable lot with the "pre-treatment" hammer stamp prior to treatment.

V. Preservatives

Sampling frequency, procedures, and analysis of preservatives will be in accordance with AWPA M2.

VI. Treatment

The inspector should normally be present during a representative treatment process. In the event he is not present, the temperature, pressure, and vacuum data will be taken from the recording charts.

VII. Inspection after Treatment

The inspector will inspect the timber after treatment and will prepare a treating report which includes applicable information listed in AWPA M2, Section 6.

VIII. Reporting

A. Inspector's Responsibility

A treating report will be prepared by the inspector, which includes the applicable information listed in AWPA M2 and will be furnished to the Inspection Services Branch of the Office of Materials and Testing.

B. Responsibility of Treating Plants and Treated Wood Suppliers

A shipment report will be furnished to the Inspection Services Branch of the Office of Materials and Testing within five (5) days of each shipment. This report must show project number or stock material (if purchased as stock material), purchaser, sizes, quantities, and preservative type. In addition, a copy of this report should be sent to the Project Engineer with each shipment.

IX. Approval of Third-Party Inspection Agency

A third-party inspection agency is defined as an independent inspection body which:

- 1. Maintains personnel qualified to conduct treated wood inspections according to applicable AWPA Standards, and
- 2. Maintains the appropriate, properly calibrated laboratory equipment with competent personnel to perform analytical methods according to applicable AWPA analytical methods.

Third-party inspection agencies shall be accredited by the American Lumber Standard Committee (ALSC) or undergo an approval process based on Georgia DOT review of an application requesting to be approved for inspection service of timber, lumber, piles, poles, and posts for contracts in which the Georgia DOT Specifications are required. The application shall contain contact information, resume and experience summaries for personnel involved in testing activities. The resume of the agency shall include the agency's history of inspection of timber and treated products, a listing of state highway agencies which have approved the inspection agency and a listing of state agencies for which the inspection agency has performed inspection. If the agency has multiple office locations, the different locations should be stated in the letter. An administrative officer of the agency shall sign and date the application and submit it to the following address or email for review:

Georgia Department of Transportation Office of Materials and Testing Inspection Services Branch 15 Kennedy Drive Forest Park, GA 30297-2599 InspectionServices@dot.ga.gov

Continued approval will be based on adequate inspection and reporting services and satisfactory results from monitoring inspections conducted by the Georgia DOT. In addition, a yearly update of the application shall be required. Inadequate inspection and reporting services or failure to provide a yearly update of the application may be considered sufficient cause to rescind approval of the treatment inspection agency.