Memo Regarding Updates to Treating Program

June 10, 2011

Introduction

AWPA has introduced a new standard which will change how TP currently collects samples and analyzes data. This new standard provides a method for third party agencies to evaluate inspection data based on average percentage core failures for penetration data and a 95% confidence interval of the mean for retention data. It provides requirements for increased inspection, warning, and disqualification when conformance fails to meet specified levels. This evaluation method does not modify or change any current penetration or retention requirement in the AWPA Standards.

Production Categories

Production categories will be established based on preservative type, wood species, and retention level. Plants will have the choice to include or exclude all of a production category.

Material Subject to Inspection

Treated products in a production category are subject to inspection whether or not they are labeled at the time of inspection, unless they have been identified by the plant QC as non-conforming and are either scheduled to be retreated or else have been retreated at least one time and are not labeled.

Sample Sets

The penetration sample set is the 20 most recent samples evaluated for penetration; the retention sample set is the 20 most recent samples evaluated for retention.

Sampling Rate

TP will obtain samples from the range of charges produced since the last inspection or from those charges produced after plant notification of any quality level decrease. In each production category, a minimum of 5% of production or 5 charges, whichever is greater, will be sampled. If less than 5 charges are available on the yard, the TP will sample all available charges that are present in adequate volumes for a representative sample. Sampling at rates higher than the

required sampling rate to provide for adequate evaluation of the production category is allowed.

Minimum Sampling
TP must take a minimum of one sample per product category in the previous three months and take a full sample set (20) in the previous 12 months.

Retention – Lower Confidence Level (LCL)
A 95% confidence interval of the mean of the retentions for each charge shall be used to calculate the LCL for each production category retention sample set. A one-tallied 95% critical value shall be used when calculating the confidence interval. The resulting LCL will be compared to the required retention.

Penetration – Average Percent Core Conformance (APCC)
The average of the percent of cores that meet the minimum penetration requirements in the individual charges comprising the penetration sample set for each production category.

Individual Component Evaluation
This method is also applicable to the evaluation of the retention of individual preservative components. TP will evaluate both the total preservative retention and all component retentions in order for the product to be deemed conforming in retention.

Plant Status Based on LCL and APCC Evaluations
All plant status levels are specific to the production category upon which the LCL and APCC are based. A new LCL and APCC shall be calculated for each production category after each inspection. Plants will often have different status levels for different production categories.

Initial Qualification
A plant may qualify in a production category when TP samples enough charges to complete a sample set (20) and calculate an LCL and APCC that meet the criteria for *Routine Frequency* status. The initial status for any production category shall be the *Increased Inspection* status.

Routine Frequency Status
TP will continue to perform unannounced random monthly (minimum) inspections to sample representative inventory and calculate new LCL's and APCC's. For each production category, if the LCL is greater than or equal to the required retention and the APCC is greater than or equal to 80%, the plant's conformance shall be considered satisfactory to maintain the *Routine Frequency* status, otherwise the plant shall be placed on *Increased Inspection* status.

Increased Inspection Status

TP will return within 2 weeks of plant notification to inspect representative inventory and calculate new LCL's and APCC's. For each production category, if the new LCL and APCC meet the criteria for *Routine Frequency* status, the plant shall return to *Routine Frequency* status. If the new LCL and APCC do not both meet the criteria for *Routine Frequency* status the plant shall be placed on *Warning Inspection* status, however, if all charges are conforming the plant shall maintain *Increased Inspection* status.

Warning Inspection Status

TP will return within 2 weeks of plant notification to inspect representative inventory and calculate new LCL's and APCC's. For each production category, if the new LCL and APCC meet the criteria for *Routine Frequency* status, the plant shall return to *Increased Inspection* status. If the new LCL and APCC do not both meet the criteria for *Routine Frequency* status the plant shall be placed on *Disqualification* status, however, if all charges are conforming the plant shall maintain *Warning Inspection* status.

Disqualification Status

For each production category, in which plants are on *Disqualification* status, labeling of any charge is prohibited except for charges that have been inspected by TP and found to have conforming penetration and retention. TP will have possession of or otherwise maintain control over their quality marks for any production category at *Disqualification* status.

Single Charge Evaluation

When the LCL and the APCC meet the *Routine Frequency* status and any charge either fails to meet 75% of the minimum required retention or has less than 60% of cores with conforming penetration, the plant shall remain at its current status and TP will re-inspect within 2 weeks of plant notification.

Biased Samples

Biased samples are samples not selected in a random, routine manner. Biased samples will be designated as "biased" by the inspector at the time of inspection. "Biased" will be recorded on both the boring sample bag and boring sample form. Biased samples will not be included when determining a plant's LCL or APCC. Specific examples for designating biased samples include the following:

- **Problem Investigation** – When treatment issues have been identified, TP will sample like inventory from the same time frame in an attempt to determine the extent of the problem and the appropriate corrective action. Sampling of like items for penetration problems shall occur during the same inspection. Sampling of like items for retention failures shall occur on the subsequent visit, when such inventory is available.

- **Retreated Charges** – TP may sample charges that have been retreated by the plant. Retreatment may occur to correct treatment deficiencies found by the plant or TP. Retreatment may also have been done to raise a lower retention product to a higher retention end-use. In this case, the sample would be considered biased if this is not a customary method for treating to the higher retention.
- **Non-conforming Charges** – Plants shall identify and isolate material found non-conforming by in-plant quality control and may hold such material for verification by TP. All such material shall be considered non-conforming.
- **Trials or Experimental Purposes** – TP may sample charges that have been treated in an effort to study the effects of new parameters, new equipment, or new preservatives. Plants may identify and isolate such material for TP inspection to verify its findings.
- **Not in Program** – TP may sample material outside of the program (recognized production categories) to determine the plant's capability to produce treated inventory to the minimum requirements or for other purposes.
- **Certificate Inspections** – TP may at times be required to sample treated products for Certification. Certificate Inspections may consist of a single charge or multiple charges grouped as "lots". Acceptance of product to be certified shall be on the basis of TP's findings.
- **Destination Inspections** – TP may inspect some treated wood at destinations. Destination inspections may consist of a single charge or multiple charges grouped as "lots". Acceptance of product at destination shall be solely on the basis of TP findings.

Implementation

TP inspectors should begin immediately taking the required sampling of 5 charges or 5% of production (whichever is greater) per product category at a minimum.

Plants currently in a program with ALSC oversight will begin with the new program on **August 2011**.

Plants currently in a program with NER oversight will begin **January 1, 2012**.

AWPA M22
Standard for Third-Party Agency Evaluation of Inspection Data

Pass Criteria		
Inspection & Qualification	Pass	LCL ¡Ã Min Ret & APCC ¡Ã 80%
Single Charge	Pass	¡Ã 75% Min Ret or¡Ã 60% Cores Pass