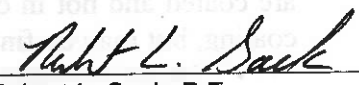


SUPERSEDED BY EB 15-031 EFFECTIVE 9/28/15			New York State Department of Transportation ENGINEERING INSTRUCTION	EI 13-002
Title: REVISION OF STANDARD SPECIFICATIONS §708-30 WOOD PRESERVATIVE – CREOSOTE OIL, §708-31 WOOD PRESERVATIVE – WATER-BORNE, AND §708-32 WOOD PRESERVATIVE – OIL-BORNE				
Target Audience: ☒ Manufacturers (18) ☐ Local Govt. (31) ☒ Agencies (32)		☐ Surveyors (33) ☒ Consultants (34) ☒ Contractors (39) ☐ _____ ()		Approved:  Robert L. Sack, P.E. Deputy Chief Engineer, Research
				12 Apr. 13 Date

ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective with projects submitted for the letting of Sept. 05, 2013.
- No issuances are superseded by this EI.
- Information transmitted by this issuance will be incorporated into the NYSDOT Standard Specifications.

PURPOSE: The purpose of this EI is to revise Standard Specifications §708-30 Wood Preservative – Creosote Oil, §708-31 Wood Preservative – Water-Borne, and §708-32 Wood Preservative – Oil-Borne.

TECHNICAL INFORMATION:

- The American Association of State Highway and Transportation Officials (AASHTO) has developed a new Standard Specification for **Preservatives and Pressure Treatment Processes for Timber** (Designation No. M133). It incorporates wood preservatives, preservative treatment processes, and inspection and testing of preservatives from the American Wood Protection Association (AWPA) and the International Code Council-Evaluation Service, Inc. (ICC-ES).
- The Federal Environmental Protection Agency (EPA) has determined that coal tar creosote is a probable human carcinogen. For this reason, the New York State Department of Environmental Conservation (NYSDEC) by means of the July 3, 2007 PHASE OUT OF CREOSOTE Law (Article 27, Title 25 – 27-2501 through 27-2513) has banned the manufacturing, selling, or use of creosote or products containing creosote in the state of New York. There are some exemptions to the law, including treatment for wood used in railroads and for utility poles.
- AWPA modified its name from American Wood-Preservers' Association to American Wood Protection Association.
- AWPA has developed a new Use Category System (U1), Preservatives Standards (P Standards), and a Processing and Treatment Standard (T1).

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- The Use Category System designates the preservative systems and retention values that have determined to be effective in protecting wood products for specified exposure conditions. It replaced the previous C1 to C36 Commodity Standards System. It is divided into six (6) different categories and subcategories:
 - UC1 – Wood and wood-based materials used in interior construction not in contact with the ground or foundations and not subject to dampness.
 - UC2 – Wood and wood-based materials used for interior construction that are not in contact with ground, but may be subject to dampness.
 - UC3 – Wood and wood-based materials used in exterior construction that are coated and not in contact with the ground. Do not require an exterior coating, but may be finished to achieve a desired aesthetic appearance.
 - ✓ UC3A => Above ground protected
 - ✓ UC3B => Above ground exposed
 - UC4 – Wood or wood based materials that are in contact with ground, fresh water, or other situations favorable to deterioration.
 - ✓ UC4A => Ground contact general use
 - ✓ UC4B => Ground contact heavy duty
 - ✓ UC4C => Ground contact extreme duty
 - UC5 – Wood and wood-based materials exposed to salt and brackish water.
 - ✓ UC5A => Northern waters
 - ✓ UC5B => Central waters
 - ✓ UC5C => Southern waters
 - UCF – Wood and wood-based materials intended for fire protection.
 - ✓ UCFA => Intended for interior construction.
 - ✓ UCFB => Intended for exterior construction.
- The Preservative/Protectants Standards describe different types of preservative systems:
 - Creosote-based preservative systems P1/P13 and P2
 - Water-borne preservative systems P5
 - Oil-borne preservative systems P8
 - Organic preservatives systems P9
- The Processing and Treatment Standard provides information and requirements on the treating processes, preservatives, and commodities.
- There is no cost impact with this EI.

IMPLEMENTATION:

- Main Office Design Quality Assurance Bureau will insert the standard specification revisions beginning with projects submitted for the letting of September 5, 2013.
- Engineers-in-Charge of ongoing contracts and those let prior to the inclusion of the standard specification revisions in the contract proposal should provide a copy of this EI to the Contractor, and file a copy of this EI in the contract records as documentation of

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the changes in accordance with the Contract Administration Manual (CAM) §104-02.

- Designers will use the latest AWWA Standards to determine appropriate wood preservative treatment rate classifications for all wood products requiring preservatives.

TRANSMITTED MATERIALS: Attached are both US Customary and Metric standard specification revisions for the following Specifications:

- § 708-30 - WOOD PRESERVATIVE - CREOSOTE OIL
- § 708-31 - WOOD PRESERVATIVE - WATER-BORNE
- § 708-32 - WOOD PRESERVATIVE - OIL-BORNE

REFERENCES: AWWA Book of Standards, AASHTO M 133

CONTACT: Direct questions regarding this issuance to Patrick Galarza via e-mail at Patrick.Galarza@dot.ny.gov or at (518) 457-4599.

WOOD PRESERVATIVE

Make the following changes to the Standard Specifications of May 1, 2008:

Pages: 841 – 842

Delete §708-30 through §708-32 in their entirety and **Replace** them with the following:

708-30 WOOD PRESERVATIVE – CREOSOTE OIL

SCOPE. These specifications cover creosote used in the treatment of wood used for railroads and for utility poles.

MATERIAL REQUIREMENTS. Creosote used in the treatment of wood used by railroads and for utility poles shall conform to the requirements of AWWA's User Categories UC3, UC4 and UC5 and the following P Standards:

Type of Preservative	AWPA Standard
Creosote	P1/P13 - Creosote Preservative
Creosote Solution	P2 - Creosote Solution

Method of application shall be in conformance with the AWWA's T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

BASIS OF ACCEPTANCE. Creosote will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.

708-31 WOOD PRESERVATIVE – WATERBORNE

SCOPE. These specifications cover waterborne wood preservatives used in the treatment of piles, timber, and lumber.

MATERIAL REQUIREMENTS. Waterborne preservative used in the treatment of piles, timber and lumber shall conform to the requirements of AWWA's User Categories UC1, UC2, UC3, UC4 and UC5 and with the P5 Standard. The method of application shall be in accordance with the T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

As an alternative to AWWA Standards, wood and wood based materials may be treated in conformance with the Acceptance Criteria for Proprietary Wood Preservative Systems (AC326) of the International Code Council-Evaluation Service, Inc. (ICC-ES).

WOOD PRESERVATIVE

Treatment of wood materials with Chromated Copper Arsenate is limited according to the September 2008 Reregistration Eligibility Decision for Chromated Arsenicals, issued by the US Environmental Protection Agency.

BASIS OF ACCEPTANCE. Waterborne wood preservatives will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.

708-32 WOOD PRESERVATIVE – OIL-BORNE

SCOPE. These specifications cover oil-borne wood preservatives used in the treatment of timber and lumber.

MATERIAL REQUIREMENTS. Pentachlorophenol Solvent A, Copper Naphthenate, and Bis (Tri-n-Butyltin) Oxide shall conform to American Wood Protection Association Standards P8 and P9 (Standards for Solvents and Formulations for Organic Preservatives Systems).

Oil-borne wood preservatives shall be applied in conformance with the Use Category Designations UC3, UC4, or UC5 of the U1 User Specification for Treated Wood Standard of the American Wood Protection Association. The method of application shall be in accordance with the T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

Treatment of wood materials with Chromated Copper Arsenate is limited according to the September 2008 Reregistration Eligibility Decision for Chromated Arsenicals, issued by the US Environmental Protection Agency.

BASIS OF ACCEPTANCE. Oil-borne wood preservatives will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.

WOOD PRESERVATIVE

Make the following changes to the Standard Specifications of May 4, 2006:

Pages: 799 – 800

Delete §708-30 through §708-32 in their entirety and **Replace** them with the following:

708-30 WOOD PRESERVATIVE – CREOSOTE OIL

SCOPE. These specifications cover creosote used in the treatment of wood used for railroads and for utility poles.

MATERIAL REQUIREMENTS. Creosote used in the treatment of wood used by railroads and for utility poles shall conform to the requirements of AWPAs User Categories UC3, UC4 and UC5 and the following P Standards:

Type of Preservative	AWPA Standard
Creosote	P1/P13 - Creosote Preservative
Creosote Solution	P2 - Creosote Solution

Method of application shall be in conformance with the AWPAs T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

BASIS OF ACCEPTANCE. Creosote will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.

708-31 WOOD PRESERVATIVE – WATERBORNE

SCOPE. These specifications cover waterborne wood preservatives used in the treatment of piles, timber, and lumber.

MATERIAL REQUIREMENTS. Waterborne preservative used in the treatment of piles, timber and lumber shall conform to the requirements of AWPAs User Categories UC1, UC2, UC3, UC4 and UC5 and with the P5 Standard. The method of application shall be in accordance with the T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

As an alternative to AWPAs Standards, wood and wood based materials may be treated in conformance with the Acceptance Criteria for Proprietary Wood Preservative Systems (AC326) of the International Code Council-Evaluation Service, Inc. (ICC-ES).

Treatment of wood materials with Chromated Copper Arsenate is limited according to the September 2008 Reregistration Eligibility Decision for Chromated Arsenicals, issued by the US Environmental Protection Agency.

WOOD PRESERVATIVE

BASIS OF ACCEPTANCE. Waterborne wood preservatives will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.

708-32 WOOD PRESERVATIVE – OIL-BORNE

SCOPE. These specifications cover oil-borne wood preservatives used in the treatment of timber and lumber.

MATERIAL REQUIREMENTS. Pentachlorophenol Solvent A, Copper Naphthenate, and Bis (Tri-n-Butyltin) Oxide shall conform to American Wood Protection Association Standards P8 and P9 (Standards for Solvents and Formulations for Organic Preservatives Systems).

Oil-borne wood preservatives shall be applied in conformance with the Use Category Designations UC3, UC4, or UC5 of the U1 User Specification for Treated Wood Standard of the American Wood Protection Association. The method of application shall be in accordance with the T1 Processing and Treatment Standard. Minimum net retention shall be as required for material in contact with soil.

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BASIS OF ACCEPTANCE. Oil-borne wood preservatives will be accepted on the basis of a material certification ensuring compliance with this specification and with AASHTO Standard Specification M-133 *Preservatives and Pressure Treatment Processes for Timber*.