

MATERIALS DIVISION

 Virginia Department of Transportation
MEMORANDUM

GENERAL SUBJECT: Fence Manufacturers and Suppliers Quality Assurance Programs	NUMBER: MD 335 - 10
SPECIFIC SUBJECT: Sections 204.16, 204.28(a),(b) and Minimum Acceptance Sampling Requirements	DATE: April 13, 2010
DIRECTED TO: District Administrators	SIGNATURE: Charles A. Babish, PE <i>Signature on original copy of memorandum</i>

This memorandum changes the acceptance method for fencing materials. It moves from project level testing to a Quality Assurance Program for Fence Manufacturers and Suppliers. There is the addition of two Approved Lists. These changes reflect operational changes resulting from restructuring of the VDOT Materials Division and District Materials Section. Modify Sec. 204 as follows:

Replace 204.16 with the following:

Sec. 204.16 Fencing

(Sec 242) Fencing products will be accepted based upon certification from the manufacturers that VDOT fence specifications are being met. Fence will be supplied to the project by approved fence suppliers.

(a) Fence Manufacturer's Requirements

To qualify for placement on the Fence Manufactures Approved List # 69 the manufacturer must:

1. *Certify that their products are Made in the USA and meet the applicable ASTM, AASHTO or other VDOT specifications. Certifications must include the following information on company letterhead: Manufacturer Name, Manufacturing Location, Product Description, and the following statement with signature:*

" We certify that these fence products are Made in America and meet the following VDOT specifications:" (list the applicable specifications)

The manufacturer certifications must be approved by the CO Materials Division Chemistry Lab Program Manager (or designee).

2. *Provide approved certifications to VDOT Materials and the fence supplier annually.*
3. *Provide fence samples to the Chemistry Lab for certification validation, if required.*

(b) Fence Supplier's Requirements

VDOT project level acceptance will be based on the requirements of the VDOT Fence Suppliers Quality Assurance Program as outlined below. This involves the documentation and certification of the product by the Supplier in combination with a Department verification sampling and testing program (VST). VDOT reserves the right to discontinue acceptance of fence in the event that VDOT verification efforts indicate that non-specification material is being provided or quality control plans are not being followed.

The following types of fence may be accepted under this program: (1) Chain Link; (2) Tension Wire; (3) Barbed Wire; (4) Lawn Fence; (5) Woven Wire; (6) Brace Wire; (7) Posts; and (8) Snow Fence.

In order to supply fence products to a VDOT project, the fence supplier shall be on the Materials Division Approved List No. 70 and use products "Made in the USA" from Approved List No.69 or wood products treated by companies on Approved List No. 45. To qualify for placement on this list, the fence supplier shall submit a Quality Control (QC) Plan defining their routine business quality control practices. The QC plan shall be submitted to the Materials Division Central Office Quality Assurance Section. After review for completeness and conformance of the supplier's QC plan to the Quality Control Fence Suppliers' Plan Checklist as found in the Appendix J of this chapter, a facility visit will be made to evaluate the supplier's conformance to his QC Plan. If during the inspection deficiencies are noted, this will be documented in a report with a follow-up visit scheduled. If no deficiencies are found, the fence supplier is probationally approved until one or more successful projects have been completed demonstrating conformance to the QC plan and that a quality product has been consistently supplied. If problems are encountered during supply within this probationary period, then additional projects may be necessary for the producer to work out QC Plan conformance issues. The fence supplier will be added to the Approved List No. 70 with a "p" to denote that the facility is probationally approved. Once the probationary period has been successfully completed, the "p" will be removed. The Department will continue to monitor the facility to ensure conformance to the QC plan and project specifications. Annually, the Department will review the updated QC plan submitted by the supplier and update the Approved List with the latest review date. The approving/ revoking authority is the Quality Assurance Engineer for suppliers and the Chemistry Laboratory Program Manager for Manufacturers. Appeals may be submitted to the State Materials Engineer for final disposition.

Shipping tickets for material sent to VDOT Projects shall include the following information: Contractor information, VDOT Project Number, Material Identification, Material Quantities shipped and the following QC statement along with signature:

"We certify that these fencing items meet VDOT specifications and conform to the VDOT Fence Suppliers Quality Assurance Program"

For fencing that may be approved on modified inspection, see Sec. 207.

Please replace Sec. 204.28 paragraphs (a) and (b) with the following

Sec. 204.28 Poles and Posts

(Secs. 221, 242.02, ~~701.02~~, and 700.02) See Sec. 207 for details of acceptance of poles and posts on modified inspection.

(a) Fence, Chain-Link

Shall be accepted as outlined in Sec. 204.16.

(b) Fence, Standard -

(1) Metal Posts and Braces

Shall be accepted as outlined in Sec. 204.16.

(2) Wood Posts and Braces(Treated)

Treated wood fence posts and braces for standard fence normally will not require sampling on the project. The preservative treatment shall be accepted on certification as outlined in Section 204.29 and Section 204.33. Locust posts require no treatment, testing, or certification. See Sec. 207 for additional details of acceptance of wood posts on modified inspection.

Please remove the following from Section 205 and renumber subsequent materials:

<p>16. Fencing— (a) Chain Link Fencing...</p>	<p>242</p>	<p>One sample from each of 3 rolls from each 50 rolls, or fraction thereof, per shipment, consisting of one woven length including at least 6 vertical wires full width top to bottom, taken from end of each roll sampled, to Central Office Laboratory. Rods, Fittings, and gates accepted on modified inspection, and require no sampling.</p>	<p>At source or job site.</p>	<p>All Fencing samples rolled into tight roll and tied securely, exercising care not to bend or kink wires.</p>	<p>If Contractor secures any fencing directly from source, properly identified and tagged, Department may test at source. See Sec. 207 for modified acceptance.</p>
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MINIMUM ACCEPTANCE SAMPLING REQUIREMENTS

MATERIAL AND TEST	ROAD AND BRIDGE SPECIFICATION REFERENCE	RATE OF SAMPLING	LOCATION FOR SAMPLING	PROPER CONTAINER AND PACKING	REMARKS
(1) Tension Wire		One 3 ft. (1 m) strand from end of one spool from each 50 spools, or fraction thereof, per shipment to Central Office Laboratory.	Same as Item 16(a).	Same as Item 16(a).	Same as Item 16(a).
(b) Standard Fencing— (1) Barbed Wire		Same as Item 16(a)(1). Rods, fittings, and gates accepted on modified inspection, and require no sampling.	Same as Item 16(a).	Same as Item 16(a).	Same as Item 16(a).
(2) Lawn....		Visual. No sampling required.			See Sec. 207 for modified acceptance.
(3) Woven Wire and Brace Wire.		One 2 ft. (0.6 m) length of woven fence, full width, or one 2 ft. strand (0.6 m) of brace wire, from end of one roll from each 50 rolls, or fraction thereof, per lot per shipment to Central Office Laboratory. Rods, fittings, and gates, and farm fence to replace old, or damaged fence to be reset, accepted on modified inspection, and require no testing.	Same as Item 16(a).	Same as Item 16(a). Woven wire may be folded and placed between 2 pieces of cardboard.	Same as Item 16(a).

MINIMUM ACCEPTANCE SAMPLING REQUIREMENTS

MATERIAL AND TEST	ROAD AND BRIDGE SPECIFICATION REFERENCE	RATE OF SAMPLING	LOCATION FOR SAMPLING	PROPER CONTAINER AND PACKING	REMARKS
(c) Miscellaneous Fencing— (1) Snow Fence.		One 2 ft (0.6 m). x full width per 100 rolls per shipment to Central Office Laboratory.	Same as Item 16(a).	Same as Item 16(a). Projecting wire turned inwardly before rolling.	Sample shall be cut from end of roll that includes 12 in. (300 mm) length of untwisted wire.
16(c)(2) Wood, Treated	242	Visual. No samples required on project.			Usually, penetration and retention approved at point of treatment. See Secs. 204.29 and 204.33. Certification Required.
(d) Posts....		See Item 28. herein.			

<p>28 Poles & Posts— (a) Fence, Chain-Link (1) End, Corner and Gate Posts and Braces....</p>	<p>242</p>	<p>One whole post per 500 posts, or fraction thereof, per shipment to Central Office Laboratory.</p>	<p>At source or job site.</p>	<p>No container necessary.</p>	<p>Aluminum alloy pipe fence posts approved on Manufacturer's certified physical and chemical analyses and require no sampling. See Sec. 207 for modified acceptance.</p>
<p>(2) Line Posts and Braces...</p>		<p>One whole post per 500 posts, or fraction thereof, per shipment to Central Office Laboratory.</p>	<p>At source or job site.</p>	<p>No container necessary.</p>	<p>Aluminum alloy pipe fence posts approved on Manufacturer's certified physical and chemical analyses and require no sampling. See Sec. 207 for modified acceptance.</p>
<p>(b) Fence, Standard (1) Metal Posts and Braces....</p>	<p>242</p>	<p>Same as Item 28(a)(1). Posts for snow fence and miscellaneous small signs accepted on modified inspection, since no testing or certification required.</p>	<p>At source or job site.</p>	<p>No container necessary.</p>	

Please add the following Appendix:

Appendix J **Fencing Suppliers QA Plan Outline Checklist**

1. Facility location, main phone number, web site, etc.	Yes	No
2. Statement of commitment to program, purpose and mission.	Yes	No
3. Personnel chart or organizational arrangement including assignment of responsibilities.	Yes	No
4. Items supplied under this plan.	Yes	No
5. Statement allowing VDOT access for necessary sampling and inspection.	Yes	No
6. Action taken when new product is received.	Yes	No
7. Summation of product storage.	Yes	No
8. Material documentation process –		
– Certifications/testing of product supplied by manufacturer	Yes	No
– Material handling/movement of approved material	Yes	No
– Labeling passing material	Yes	No
– How failed material is handled	Yes	No
– Information pertaining to size of lot, lot number, batch number, batch quantity and roll numbers, etc. if available.	Yes	No
– Brand name and manufacturer of material.	Yes	No
– Material from Approved List 69 or 45	Yes	No
– Material Made in the USA	Yes	No
– Sample of ticket sent to VDOT projects including the QC statement on the ticket.	Yes	No
– Authorized personnel must sign QC statement.	Yes	No
– Inventory Tracking System	Yes	No
9. Copy of records retained for minimum of five years and a copy made for VDOT Inspector.	Yes	No

Please add the following Approved Lists No. 69 and 70

List No. 69
*(69) **APPROVED FENCE MANUFACTURERS LIST** – (Chemistry Lab)*

Manufacturer
Product Descriptions
Manufacturer
Product Descriptions
Manufacturer
Product Descriptions

List No. 70
 (70) ****APPROVED QA FENCE SUPPLIERS LIST**** – (Quality Assurance)

Supplier	Location

(*P) = Probationary

CY:

Commissioner
 Chief Engineer
 Division Administrators
 Residency Administrators
 District Materials Engineers
 District Construction Engineers
 District Maintenance Engineers

 Area Construction Engineers
 Virginia Asphalt Association

Virginia Transportation Research Council
 Virginia Ready-Mixed Concrete Association
 Precast Concrete Association of Virginia
 Virginia Transportation Construction Alliance
 Virginia Dept. of Minority Business Enterprise
 Federal Highway Administration
 American Concrete Paving Association
 NE Chapter, Southern Region
 Old Dominion Highway Contractors Association