

VIRGINIA DEPARTMENT OF TRANSPORTATION

MATERIALS DIVISION

MEMORANDUM

GENERAL SUBJECT: Changes to the Materials Certification Schools Program	NUMBER: MD 431-20
SPECIFIC SUBJECT: Revision of Chapters 1, 2, 4 and Appendix G of the Materials Division's Manual of Instruction to reflect changes in the Materials Certification Schools Program	DATE: February 20, 2020
	SUPERSEDES:
APPROVED:	Charles A. Babish, PE State Materials Engineer Approved: _____

EFFECTIVE DATE

- This memorandum is effective
- _____

PURPOSE/NEED/SCOPE/REQUIREMENTS

- Revise the Manual of Instruction to reflect changes in the Materials Certification Schools Program, specifically in Chapters 1, 2 and 4 and Appendix G. These changes reflect the addition of pavement recycling method certifications and revisions to VDOT's Concrete certification requirements that were implemented in 2019.
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Changes are **Shaded**

PROCEDURES

- Revise Chapter 1, Sec. 114.01 Specification Requirements as follows:

The placement of Concrete requires the presence of an **Certified Concrete Field Technician** American Concrete Institute's Concrete Field Testing Technician Grade I or WACEL Concrete I certified technician.

The Contractor shall have a Cold Asphalt Recycling Field Technician present during recycling operations.

The Contractor shall have an Cold Asphalt Recycling Plant Technician present during recycling operations.

The Contractor shall have an Full Depth Reclamation Technician present during reclamation operations.

- Revise Chapter 1, Sec. 114.03 Certification Titles as follows:

School	Certification Title
Asphalt Field Level I	Asphalt Field Level I Technician
Asphalt Field Level II	Asphalt Field Level II Technician
Slurry Surfacing	Slurry Surfacing Technician
Surface Treatment	Surface Treatment Technician
Asphalt Plant Level I	Asphalt Plant Level I Technician
Asphalt Plant Level II	Asphalt Plant Level II Technician
Asphalt Plant Mix Design	Aggregate Properties Mix Design Technician
Asphalt Plant Mix Design	Asphalt Mix Design Technician
Concrete Field	Concrete Field Technician
Cold Asphalt Recycling Field	Cold Asphalt Recycling Field Technician
Cold Asphalt Recycling Plant	Cold Asphalt Recycling Plant Technician
Concrete Plant	Concrete Plant Technician
Central Mix Aggregate Plant	Central Mix Aggregate Technician
Full Depth Reclamation	Full Depth Reclamation Technician
Soils and Aggregate Field	Soils Compaction Technician
Pavement Marking	Pavement Marking Technician

- Revise Chapter 1, Sec. 114.04 Steps Required for Certification as follows:

Proficiency Examination Requirements

Materials Certification Title	School	Proficiency Requirements	Contact Information
Asphalt Field Level I Technician	Asphalt Field Level I	No proficiency examination required	No proficiency examination required
Asphalt Field Level II Technician	Asphalt Field Level II	No proficiency examination required	No proficiency examination required
Asphalt Plant Level I Technician	Asphalt Plant Level I	Road & Bridge Specification 211.05, AASHTO R47	MCS Program Office Germanna Community College 540-937-6757
Asphalt Plant Level II Technician	Asphalt Plant Level II	AASHTO T30, AASHTO T166, AASHTO T209, AASHTO T269, AASHTO T312, VTM-102	MCS Program Office Germanna Community College 540-937-6757
Asphalt Plant Mix Design Technician	Asphalt Plant Mix Design	ASTM D4791, ASTM D5821, AASHTO T176, AASHTO T304, AASHTO T84, AASHTO T85, AASHTO T19, AASHTO T30, AASHTO T312, VTM-102, AASHTO T209, AASHTO T166, AASHTO T283	MCS Program Office Germanna Community College 540-937-6757
Central Mix Aggregate Technician	Central Mix Aggregate Plant	AASHTO T2, AASHTO T11, AASHTO T27, AASHTO T248, AASHTO T255, AASHTO T89, AASHTO T90	MCS Program Office CCWA 804-523-2290
Concrete Field Technician	Concrete Field	ACI Concrete Field Level I (ASTM C172, ASTM C1064, ASTM C143, ASTM C31, ASTM C231, ASTM C173, ASTM C138)	Virginia Ready-Mix Concrete Association (VRMCA) (434) 977-3716

- Revise Chapter 1, Sec. 114.15 Alternate Certifications as follows:

VDOT will recognize NICET Construction Materials Testing Level II Certification in Soils. Individuals possessing a current NICET Construction Materials Testing Level II Certification in Soils will not need to obtain a VDOT Soils and Aggregate Compaction Certification. Similarly, VDOT will recognize NICET Construction Materials Testing Level II Certification in Concrete. Individuals possessing a current NICET Construction Materials Testing Level II Certification in Concrete will not need to obtain an ~~VDOT Concrete Field Certification~~ ACI Concrete Field Testing Technician Grade I or WACEL Concrete I certification. Individuals not possessing a current

NICET certification described above, have the option of obtaining the prescribed NICET certification or the applicable VDOT certification.

- Revise Chapter 2, Sec. 204.22 Masonry Units, Concrete, (c) Miscellaneous Precast Units as follows:

Each approved facility must have at least one Precast Concrete Quality Control (QC) Technician¹ on staff responsible for ensuring that the QC plan is being followed. To qualify as a Precast Concrete QC Technician, one has either: a) a current VDOT Concrete Plant ~~and Field Certification which include~~ and an American Concrete Institute's Concrete Field Testing Technician Grade I or WACEL Concrete I certification or b) a National Precast Concrete Association Production and Quality School Level I Technician certification, an American Concrete Institute's Concrete Field Testing Technician Grade I certification ~~or WACEL Concrete I~~, and VDOT Concrete Plant Certification. Each QC Technician must have a unique quality control stamp for approval of work and documented in QC plan. VDOT specifications and policies over-ride other plant certifications or specifications denoted in the third-party plant certification.

(2) Test facilities

Producer facilities, equipment and testing personnel shall be adequate to conduct the applicable tests outlined in AASHTO T280, and shall require Department approval. Quality Control procedures shall be performed by or under the direction of a Precast Concrete QC Technician. To qualify as a Precast Concrete QC Technician, one has either a) current VDOT Concrete Plant ~~and Field Certification which include~~ and an American Concrete Institute's Concrete Field Testing Technician Grade I or WACEL Concrete I certification b) a National Precast Concrete Association Production and Quality School Level I Technician certification, an American Concrete Institute's Concrete Field Testing Technician Grade I certification ~~or WACEL Concrete I certification~~, and VDOT concrete plant certification. The Quality Control person operating the batching equipment (batcher) must pass an annual concrete batching exam developed by the precast facility and identified within QC plan.

- Revise Chapter 4, Sec. 403 Certifications as follows:

~~HCC Field Technician~~ American Concrete Institute's Concrete Field Testing Technician Grade I or WACEL Concrete I – Reference the Virginia Road and Bridge Specifications (VRBS), Sections 200.06 and 217.07. This certification is required when performing acceptance tests in the field. ~~The VDOT HCC Field Technician certification consists of both the ACI Concrete Field Testing Technician Grade I and the VDOT HCC Field School.~~

~~HCC Concrete~~ Plant Technician – Reference the Virginia Road and Bridge Specifications (VRBS), Sections 200.06 and 217.07. This certification is required to produce HCC at a concrete plant and for driver/technicians of high-performance volumetric truck mixers.

- Revise Appendix G as follows:

**Appendix G: System-based Independent Assurance Evaluation Form
For Hydraulic Cement Concrete**

Date: _____

Evaluatee: (printed) _____ (signed) _____

Evaluator: (printed) _____ (signed) _____

Evaluatee's ~~VDOT Hydraulic Cement Concrete Field Certification~~ American Concrete
Institute's Concrete Field Testing Technician Grade I or WACEL Concrete I Expiration
Date _____

NOTES

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REFERENCES

- _____

COPY DISTRIBUTION:

Deputy Chief Engineer
Division Administrators
District Administrators
District Location & Design Engineers
District Construction Engineers
District Maintenance Engineers
District Bridge Engineers
District Traffic Engineers

VDOT Resident Engineers
Federal Highway Administration
Virginia Ready Mix Association
Precast Concrete Association of Virginia
Virginia Transportation Construction Alliance
Virginia Asphalt Association
American Concrete Paving Association Mid-Atlantic Chapter
Old Dominion Highway Contractors Association