



**VIRGINIA SOIL AND WATER
CONSERVATION BOARD
GUIDANCE DOCUMENT ON
ENGINEERING JOB
APPROVAL AUTHORITY
PROCEDURES**

(Approved December 6, 2017)

Summary:

This guidance document specifies the procedures and criteria to be utilized for DCR Engineering Job Approval Authority certification.

Electronic Copy:

An electronic copy of this guidance in PDF format is available on the Regulatory Town Hall under the Virginia Soil and Water Conservation Board at <http://townhall.virginia.gov/L/GDocs.cfm>

Contact Information:

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Engineering Job Approval Authority Procedures

I. Background:

The Virginia Agricultural Cost Share Program (VACS) is implemented at the local level by the Soil and Water Conservation Districts, under the direction of the Virginia Soil and Water Conservation Board, pursuant to §10.1-546.1 of the *Code of Virginia*. The Virginia Soil and Water Conservation Board (Board) is charged with overseeing the programs of the Districts in §10.1-505 of the *Code of Virginia*. The Board annually adopts the Virginia Agriculture Cost-Share (VACS) Best Management Practice (BMP) Manual which includes design standards and specifications for all BMPs, including structural BMPs that require engineered designs. Design and construction of practices considered engineering require the District employee to hold appropriate levels of DCR Engineering Job Approval Authority (EJAA). DCR EJAA is assigned for each of the applicable USDA-Natural Resources Conservation Service (NRCS) components listed for the VACS practice in the Virginia Agricultural Cost-Share BMP Manual (VACS BMP Manual). Practices that require DCR EJAA have been identified by the Department's Agricultural BMP Engineer using the USDA-NRCS National Handbook of Conservation Practices Lead Discipline assignments. Some NRCS Standards have been identified as requiring a Professional Engineering (PE) license to design. A complete list of NRCS Standards that require DCR EJAA or a PE is provided in the VACS BMP Manual. This guidance outlines procedures related to the issuance of DCR EJAA as well as the criteria required to obtain and retain DCR EJAA. All practices are subject to NRCS Conservation Practice Standards and Construction Specifications found at <https://efotg.sc.gov.usda.gov/treemenuFS.aspx>.

Additionally, engineering design is subject to information detailed in the USDA-NRCS National Engineering Manual (NEM). Upon development of a technical manual, all criteria outlined in the manual shall be followed in addition to the NRCS Conservation Practice Standards. This certification process replaces any previously issued NRCS EJAA. As of January 1, 2018, NRCS EJAA will no longer be valid for Soil and Water Conservation District Employees and all engineering designs for the VACS Program must be done by an individual who is certified with DCR EJAA, or licensed as a PE in the Commonwealth of Virginia.

II. Authority:

The *Code of Virginia* contains the following authorities applicable to this guidance:

§ 10.1-505. Duties of Board.

3. To oversee the programs of the districts.

§ 10.1-546.1. Delivery of Agricultural Best Management Practices Cost-Share Program.

Districts shall locally deliver the Virginia Agricultural Best Management Practices Cost-Share Program described under § 10.1-2128.1, under the direction of the Board, as a means of promoting voluntary adoption of conservation management practices by farmers and land managers in support of the Department's nonpoint source pollution management program.

Appendix 1 contains the *Code of Virginia* authorities (extended) applicable to this guidance.

III. Discussion and Interpretation:

This service provides engineering assistance to the 47 Soil and Water Conservation Districts across the Commonwealth. Engineering assistance includes; engineering support with designs, training of District staff, and the implementation of various quality control mechanisms. The most notable of these quality control mechanisms is the implementation of the Department's Engineering Job Approval Authority (EJAA) service.

The Department now has a Professional Engineer to serve as the State Engineer for agricultural BMP practices. With the addition of this professional staff, the Department developed a process to issue EJAA to District staff who have demonstrated competency in the design and construction of various agricultural best management practices per USDA-NRCS standards and specifications.

If a District staff person does not have DCR EJAA for any of the practice components being designed or installed as part of the VACS practice, they are not authorized by the Department to proceed to construction of the practice components. As a result, they should contact the Department Agricultural Engineer or technician servicing their District for further instructions on what requirements will be needed to complete the practice.

Categories and Levels of DCR EJAA

There are three categories of DCR EJAA:

1. Investigation and Evaluation (I&E): On site observations of an exploratory nature for planning and preparation of sound alternative solutions of sufficient intensity for the cooperators to make treatment decisions. May require assistance from higher levels for large or complex jobs. (See NEM Section 501 and 510).
2. Design: Designing and checking all aspects of the supporting data, drawings, and specifications to ensure that the planned practice will meet the purpose for which it is installed. Also includes setting any specific inspection requirements. Approval signature is required. (See NEM 501 and 511)
3. Construction: Surveys, layout, staking, inspection of materials and work, making tests to determine that the job meets specifications. Approval signature is required. (See NEM 501 and 512)

Various levels of DCR EJAA are issued for each NRCS component. For example, DCR EJAA may be issued for up to 1,500 feet of Livestock Pipeline or up to 3,000 feet of Livestock Pipeline, depending on the competency demonstrated by the individual. The levels of DCR EJAA issued for each component are maintained by the Department and are provided to each District after each review.

Review Criteria for Receiving DCR EJAA

All new DCR EJAA requires review of a minimum of three complete designs packages. The person requesting the review must have contributed to the designs and this shall be documented in the “designed by” box on the standard drawings. For a review to re-certify existing DCR EJAA, three designs is preferred, but less will be accepted if the individual has not completed three designs since the last review. All review criteria is listed on the USDA-NRCS website, eFOTG, at <https://efotg.sc.egov.usda.gov/treemenuFS.aspx>.

Criteria used for Design EJAA is listed for each NRCS standard under “Design Data”.

Criteria used for Construction EJAA is listed for each NRCS standard under “Check Data”.

To obtain I&E EJAA, the individual must demonstrate competency in planning the appropriate NRCS standard for the resource concern. Please note, this does not require Conservation Planning Certification.

Review Frequency

Issuance, or renewal, of DCR EJAA is at the discretion of the reviewer. Reviews will occur either every three years or once per year based on the following criteria:

- Three year review frequency: District employees who have held EJAA (either NRCS or DCR) for three or more years may qualify for a three year review frequency.
- One year review frequency:
 - District employees who have never held EJAA (either NRCS or DCR), shall have a yearly review for the first three years of certification.
 - District employees who have held EJAA (either NRCS or DCR) for more than three years, but who have not had a satisfactory review (as determined by the reviewer), shall have an additional review no later than one year after the unsatisfactory review to ensure all comments from that review have been addressed. The requirement for another review within one year is in lieu of invalidating EJAA. If the second review is satisfactory, the reviewer may determine that the employee qualifies for a three year review.

Certification Documents

Certification documents shall be issued to each District employee upon completion of a review. These documents will include a letter that details whether the review was deemed satisfactory, whether any deficiencies were found during the review, when the next review will be conducted, and a statement regarding the status of the individual's DCR EJAA. Certification documents shall also include an EJAA Certification sheet specific to the individual employee. All issued DCR EJAA, including the corresponding levels and categories (e.g. I&E, Design, Construction), will be listed.

Designs by a Professional Engineer (PE)

If a design is performed by a registered PE, either by contract or District employment, the PE must have a current license in the Commonwealth of Virginia. Additionally, the PE must sign, seal, and date each plan sheet, including the cover sheet.

Appendix 1

Applicable *Code of Virginia* Authorities.

The *Code of Virginia* contains the following authorities applicable to this Guidance:

§ 10.1-505. Duties of Board.

In addition to other duties and powers conferred upon the Board, it shall have the following duties and powers:

1. To give or loan appropriate financial and other assistance to district directors in carrying out any of their powers and programs.
2. To keep district directors informed of the activities and experience of all other districts, and to facilitate an interchange of advice and experience between the districts.
3. To oversee the programs of the districts.
4. To secure the cooperation and assistance of the United States and any of its agencies, and of agencies of the Commonwealth, in the work of the districts.
5. To disseminate information throughout the Commonwealth concerning the activities and programs of the districts, and to encourage the formation of such districts in areas where their organization is desirable.
6. To assist persons, associations, and corporations engaged in furthering the programs of the districts; to encourage and assist in the establishment and operation of such associations and corporations, and to authorize financial assistance to the officers and members of such associations and corporations in the discharge of their duties.
7. To receive, review, approve or disapprove applications for assistance in planning and carrying out works of improvement under the Watershed Protection and Flood Prevention Act (Public Law 566 -- 83rd Congress, as amended), and to receive, review and approve or disapprove applications for any other similar soil and water conservation programs provided in federal laws which by their terms or by related executive orders require such action by a state agency.
8. To advise and recommend to the Governor approval or disapproval of all work plans developed under Public Law 83-566 and Public Law 78-535 and to advise and recommend to the Governor approval or disapproval of other similar soil and water conservation programs provided in federal laws which by their terms or by related executive orders require approval or comment by the Governor.
9. To provide for the conservation of soil and water resources, control and prevention of soil erosion, flood water and sediment damages thereby preserving the natural resources of the Commonwealth.
10. To adopt regulations (i) for the operation of the voluntary nutrient management training and certification program as required by § 10.1-104.1 and (ii) that amend the application rates in the Virginia Nutrient Management Standards and Criteria as required by § 10.1-104.2:1.
11. To provide, from such funds appropriated for districts, financial assistance for the administrative, operational and technical support of districts.

§ 10.1-546.1. Delivery of Agricultural Best Management Practices Cost-Share Program.

Districts shall locally deliver the Virginia Agricultural Best Management Practices Cost-Share Program described under § 10.1-2128.1, under the direction of the Board, as a means of

promoting voluntary adoption of conservation management practices by farmers and land managers in support of the Department's nonpoint source pollution management program.