

PART I.

GENERAL.

18 VAC 145-20-10. Definitions.

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise.

"Board" means the Board for Professional Soil Scientists as established by Chapter 22, (§ 54.1-2200 et seq.) of Title 54.1 of the Code of Virginia.

"Department" means the Department of Professional and Occupational Regulation.

"Field study" means the investigation of a site to secure soils information by means of landscape analysis, and soil borings, excavations or test pits which are ~~located~~ plotted on a base map or other documents (e.g., aerial photographs, topographic maps, scaled site plans, subdivision plans, or narrative description of the location).

"Practice of soil evaluation" means the evaluation of soil by accepted principles and methods including, but not limited to, observation, investigation, and consultation on measured, observed and inferred soils and their properties;

analysis of the effects of these properties on the use and management of various kinds of soil; and preparation of soil descriptions, maps, reports and interpretive drawings.

"Soil" means the groups of natural bodies occupying the unconsolidated portion of the earth's surface which are capable of supporting plant life and have properties caused by the combined effects, as modified by topography and time, of climate and living organisms upon parent materials.

"Soil evaluation" means plotting soil boundaries, describing and evaluating the kinds of soil and predicting their suitability for and response to various uses.

"Soil map" means a map showing distribution of soil types or other soil mapping units in relation to the prominent landforms and cultural features of the earth surface.

"Soil science" means the science dealing with the physical, chemical, mineralogical, and biological properties of soils as natural bodies.

"Soil scientist" means a person having special knowledge of soil science and the methods and principles of soil evaluation as acquired by education and experience in the formation, description and mapping of soils.

"Soil survey" means a systematic field investigation of the survey area that provides a soil evaluation and a system

of uniform definitions of soil characteristics for all the different kinds of soil found within the study area, all of which are incorporated into a soil report which includes a soil map.

~~18 VAC 145-20-20. Procedural requirements. (Repealed)~~

~~A. Each applicant is responsible for obtaining a current application package. All correspondence and requests for applications should be directed to: Assistant Director
Board for Professional Soil Scientists
Department of Professional and Occupational Regulation
3600 West Broad Street
Richmond, Virginia 23230
(804) 367-2785~~

~~B. Fully documented applications must be submitted with the appropriate fee(s) by applicants seeking consideration for certification no later than 90 days prior to the scheduled examination. The date the completely documented application and fees are received in the board's office shall determine if the application meets the deadline set by the board. Incomplete applications will be returned to the applicant.~~

~~C. Applicants who have been found ineligible for any reason, may request further consideration by submitting in~~

writing

~~evidence of additional qualifications, training or experience.~~

~~No~~

~~additional fee will be required provided the requirements for certification are met within a period of three years from the~~

~~date~~

~~the original application is received by the Department of Professional and Occupational Regulation.~~

~~D. Members of the board may not serve as personal references, but they may be listed as persons who have supervised~~

~~the work of the applicant.~~

~~E. The board may make further inquiries and investigations with respect to the qualifications of the applicant and all references, etc. to confirm or amplify information supplied.~~

~~F. Failure of an applicant to comply with a written request from the board for additional evidence or information within 60 days of receiving such notice, except in such instances where the board has determined ineligibility for a clearly specified period of time, may be sufficient and just cause for disapproving the application.~~

~~G. For the purpose of determining eligibility or requirements for examination or qualification for practice,~~

~~the board may require a personal interview with the applicant.~~

~~H. Notice of examination. Each candidate will be sent a written notice of the time and place of any examination for which~~

~~the candidate is eligible. Each candidate shall promptly notify~~

~~the board as to whether the candidate intends to appear for the~~

~~examination and pay the examination fee as instructed.~~

~~Failure to so notify the board may result in loss of eligibility for that particular examination. Each examination fee shall be applied to~~

~~the next scheduled examination and shall be forfeited for failure~~

~~to notify the board or for failure to appear.~~

~~18 VAC 145-20-30. Determining qualifications of applicants.~~
(Repealed)

~~In determining the qualifications of an applicant for certification as a professional soil scientist, a majority vote of the board members who are soil scientists shall be required.~~

~~18 VAC 145-20-40. Fees. (Repealed)~~

~~A. The following nonrefundable fees are required and~~

shall

~~not be prorated:~~

- ~~1. The application fee for certification shall be \$150.00.~~
- ~~2. The fee for renewal of certification shall be \$175.00.~~
- ~~3. The fee for taking the examination or reexamination for certification shall be \$150.00.~~
- ~~4. The penalty fee for late renewal or reinstatement shall be \$200.00.~~

~~B. Deadline for applications and examination fees.~~

~~Fully documented, completed applications must be submitted with the proper application fee and received in the board's office no later than 90 days prior to the next scheduled exam. Examination and reexamination fees must be received in the board's office no later than 30 days prior to the next scheduled examination.~~

~~18 VAC 145-20-50. Applicability of certification program.~~

~~(Repealed)~~

~~The Certification Program for Professional Soil Scientists set forth in Chapter 22 of Title 54.1 of the Code of Virginia and this chapter is voluntary and shall not be construed to prohibit:~~

- ~~1. The practice of soil evaluation by individuals who are not certified soil scientists as defined in this regulation;~~
- ~~2. The work of an employee or a subordinate of a certified soil scientist or of an individual who is practicing soil evaluation without being certified;
or~~
- ~~3. The practice of any profession or occupation which is regulated by another regulatory board within the Department of Professional and Occupational Regulation.~~

PART II.

ENTRY.

[18 VAC 145-20-60. Qualifications for certification.]

Applicants for certification shall meet the education, eligibility, experience and examination requirements specified in Chapter 22 of Title 54.1 of the Code of Virginia.]

18 VAC 145-20-70. Qualification for examination.

An applicant shall satisfy one of the following criteria in order to qualify for the examination:

1. Hold a bachelor's degree from an accredited institution of higher education in a ~~soils~~ soil science curriculum (see 18 VAC 145-20-91) which has been approved by the board and have at least four years of experience in soil evaluation, the quality of which demonstrates to the board that the applicant is competent to practice as a professional soil scientist; or
2. Hold a bachelor's degree in one of the natural sciences and have at least five years of experience in soil evaluation, the quality of which demonstrates to the board that the applicant is competent to practice as a professional soil scientist; or
3. Have a record of at least eight years of experience

in soil evaluation, the quality of which demonstrates to the board that the applicant is competent to practice as a professional soil scientist; or

4. Have at least four years of experience in soil science research or as a teacher of ~~soils~~ soil science curriculum in an accredited institution of higher education which offers an approved four-year program in soils and at least two years of soil evaluation experience, the quality of which demonstrates to the board that the applicant is competent to practice as a professional soil scientist.

~~18 VAC 145-20-80. Waiver from examination through reciprocity or experience. (Repealed)~~

~~Any person certified, registered or licensed as a soil scientist in any jurisdiction of the United States may be granted a Virginia certificate without written examination, provided that:~~

- A. ~~The applicant holds an unexpired certificate or equivalent issued on the basis of equivalent requirements for certification in Virginia, by a regulatory body of another state, territory or~~

~~possession of the United States and is not the subject of any disciplinary proceeding before such regulatory body which could result in the suspension or revocation of his certificate, and such other regulatory body recognizes the certificates issued by this board, or~~

- ~~B. Any person who can verify a record of at least ten years of experience in soil evaluation, the quality of which demonstrates to the board the applicant is competent to practice as a professional soil scientist.~~

18 VAC 145-20-90. Qualifying experience in soil evaluation.

~~A. An applicant must shall demonstrate at least one half of the required experience in one two or all more of the following areas:~~

- ~~1. Soil mapping. Compiling of soil maps representing at least 5000 acres as a part of a soil survey or surveys with a formal mapping legend under the direct guidance of an experienced technical supervisor. Acceptable maps shall be maps in a published report, a report scheduled to be published or a report of a publishable quality; or~~
- ~~2. Soil evaluation. Conducting at least 20 soil~~

~~evaluations usually from existing soil data for a specific land use, such as septic tank drain fields uses under the direct guidance of an experienced technical supervisor. Examples of such uses include, but are not limited to, on-site wastewater disposal, residential and commercial development, sanitary landfill sites, forestry production, or individual farm mapping for agriculture production, soil erosion and sediment control, shrink-swell or hydric soils. The experience shall be supervised by an individual with a minimum of a year's more experience than the applicant. The finished product shall have been submitted to a client or government agency (e.g., Health Department, Environmental Protection Agency, Environmental Impact Studies, Department of Environmental Quality, [Department of Conservation and Recreation] local planning commission); or~~

3. ~~Field/Laboratory studies. Conducting at least 10 detailed field or laboratory studies which have been done under the supervision direct guidance of an individual with a minimum of a year's more experience than the applicant experienced technical supervisor. The field or laboratory study shall have~~

resulted in a soil evaluation report that was accepted by the client or government agency.

4. Research/Teaching. Conducting at least one research project as part of a thesis or publication or teaching at least one full time course in a soil science curriculum at an accredited institution of higher education the quality of which demonstrates to the board that the applicant is competent to practice as a professional soil scientist.

~~B. The remaining required experience may be fulfilled in one or more of the following areas:~~

~~1.5. Consulting (public/private). Assembling or compiling soil information either with existing data or field studies, and evaluating data for a specific land use. The work may be either done independently ~~done~~ or ~~done~~ under supervision. ~~The~~ At least three written ~~report~~ reports shall have been submitted to the client or government agency.~~

~~2. Soil mapping, soil evaluation, or field studies, as described above, which have been done independently or under supervision.~~

~~3.6. Education. Each year of full-time undergraduate study in a soils curriculum or related natural science may count as one-half year of experience up~~

to a maximum of two years. Each year of full-time graduate study in a soils curriculum may count as one year of experience up to a maximum of two years. With a passing grade, ~~32~~ 30 semester credit hours or ~~48~~ 45 quarter credit hours is considered to be one year. ~~No credit~~ Credits used ~~as to meet~~ education ~~credit requirements~~ may ~~also not~~ be used ~~as to meet~~ experience ~~credit requirements~~.

18 VAC 145-20-91. Core Course Requirements.

A. At least 15 semester hours selected from the identified courses below or the equivalent are required for course work or a degree core to be considered a soil science degree or a soil science related degree.

Intro to Crop and Soil Environmental Sciences

Soil Evaluation _____ Soil

Genesis/Classification

Soils _____ Soil

Fertility/Management

Soils Lab _____ Soil _____ Fertility/Management

Lab

Man and Environment _____ Soil/Groundwater Pollution

Soil Survey/Taxonomy _____ Soils for Waste Disposal

Soil Microbiology _____ Soil Microbiology Lab

Soil Resource Management _____ Forest Soils/Hydrology
Soil Chemistry _____ Clay Mineralogy
Topics in Soil Genesis _____ Soil Interpretations
Soil Seminar _____ Advanced Concepts in Soil
Genesis
Special Studies(Soils Based) Independent Studies (Soil
Based)
Field Studies (Soils Based) Soil Biochemistry
Soils and Land Use _____ Soil Geomorphology
Soil Physical and Colloidal Soil Conservation
Chemistry
Soil - Plant Relations _____
Soil - Plant - Animal Interrelationships in Grasslands
Aluminum Chemistry in the Soil System
Soil Physics or Physical Properties

An applicant may petition the board in writing to review
the syllabus and other supporting documents of a course not
listed in subsection A of this section for academic credit.
The course shall contain content to enhance the knowledge of
the applicant in the study of soils. The applicant must
demonstrate course equivalency in order to receive academic
credit.

18 VAC 145-20-100. Examination.

A. A board-approved examination shall be administered at least ~~once~~ twice a year, at a time designated by the ~~board~~ department.

B. An applicant must meet all eligibility requirements as of the date the application is filed with the ~~board~~ department.

C. A candidate who is unable to take the examination at the time scheduled must notify the [~~board~~ department] in writing prior to the date of the examination; such a candidate will be rescheduled for the next examination without additional fee. Failure to so notify the ~~board~~ department will result in forfeiture of the examination or reexamination fee.

~~D. A candidate who has not appeared for an examination after the first written notice regardless of reasons, will not be sent another examination notice until the candidate submits a written request to be rescheduled.~~

~~E. A candidate who does not appear for an examination within two years of approval will be ineligible to sit for an examination.~~

~~Individuals wishing to sit for an examination will be required to submit a new application with fee in accordance with these regulations.~~

D. A candidate approved to take an examination shall do so within one year of the date of approval or submit a new application and fee in accordance with these regulations.

~~F. E. Candidates will be notified of passing or failing the examination. No scores will be reported to candidates. Only the board and its staff shall have access to examination papers, scores and answer sheets.~~

~~G. F. Upon payment of the reexamination fee, a candidate who is unsuccessful in passing an fails the examination will or any part thereof shall be allowed to retake any examination(s) given the failed examination or any part thereof within two years one year of the date of initial failure notification of~~

~~initial unsuccessful examination results.~~ After the ~~two-year~~
~~one-year~~ period has elapsed, an applicant ~~will~~ shall be
required to submit a new application with and fee in
accordance with these regulations in order to take ~~an~~ the
examination.

~~18 VAC 145-20-110. Core Course Requirements. (Repealed)~~

A. ~~At least fifteen (15) semester hours selected from the
identified courses below or the equivalent are required
for course work or a degree core to be considered a soil
science degree or a soil science related degree.~~

~~Intro to Crop and Soil Environmental Sciences~~

~~Soil Evaluation~~ ~~Soil~~

~~Genesis/Classification~~

~~Soils~~ ~~Soil~~

~~Fertility/Management~~

~~Soils Lab~~ ~~Soil~~ ~~Fertility/Management~~

~~Lab~~

~~Man and Environment~~ ~~Soil/Groundwater Pollution~~

~~Soil Survey/Taxonomy~~ ~~Soils for Waste Disposal~~

~~Soil Microbiology~~ ~~Soil Microbiology Lab~~

~~Soil Resource Management~~ ~~Forest Soils/Hydrology~~

~~Soil Chemistry~~ ~~Clay Mineralogy~~

~~Topics in Soil Genesis~~ ~~Soil Interpretations~~

~~Soil Seminar~~ ~~Advanced Concepts in Soil
Genesis~~

~~Special Studies (Soils Based) Independent Studies (Soil
Based)~~

~~Field Studies (Soils Based) Soil Biochemistry~~

~~Soils and Land Use Soil Geomorphology~~

~~Soil Physical and Colloidal Soil Conservation~~

~~Chemistry~~

~~Soil - Plant Relations~~

~~Soil - Plant - Animal Interrelationships in Grasslands~~

~~Aluminum Chemistry in the Soil System~~

~~Soil Physics or Physical Properties~~

~~The applicant must demonstrate course equivalency.~~

~~B. An applicant may petition the board in writing to review
for academic credit the syllabus and other supporting
documents of a course not listed in subsection A of this
section. The course shall contain content to enhance the
knowledge of the applicant in the study of soils.~~

**18 VAC 145-20-111. Waiver from examination through reciprocity
or experience.**

An applicant qualified to take the examination may be granted
a Virginia certificate without written examination, provided
that:

1. The applicant holds an unexpired professional soil scientist certificate or equivalent issued on the basis of equivalent requirements for certification in Virginia, by a regulatory body of another state, territory or possession of the United States and is not the subject of any disciplinary proceeding before such regulatory body which could result in the suspension or revocation of his certificate, and such other regulatory body recognizes the certificates issued by this board, or

2. The applicant can verify a record of at least ten years of experience as set forth in 18 VAC 145-20-90 in soil evaluation which demonstrates to the board that the applicant is competent to practice as a professional soil scientist.

PART III.

RENEWAL OF CERTIFICATE RENEWAL/REINSTATEMENT AND FEES.

18 VAC 145-20-120. Expiration.

~~Certificates issued by the board under this chapter shall expire on June 30 of each odd numbered year following the date of issuance. Certificate holders shall be notified by mail of the fee and the procedure for renewal at least 45 days before the date the certificate expires. Certificate holders must submit the renewal notice and appropriate fee before the certificate expires.~~

two years from the last day of the month in which they were issued, as indicated on the certificate.

18 VAC 145-20-130. Procedures for Renewal.

~~A. If the renewal fee is not received by the board within 30 calendar days following the expiration date noted on the certificate, a penalty fee of \$200 shall be required in addition to the regular renewal fee. No certificate may be renewed more than six months following the date of expiration.~~

~~BA. The department shall mail a renewal notice to the certificate~~

~~holder at the last known address of record at least 30 days~~

prior to expiration. Failure to receive ~~written~~ this notice from

~~the Department of Professional and Occupational Regulation~~ does not relieve the certificate holder from the requirement to renew the certificate. If the certificate holder fails to receive the renewal notice, ~~the certificate holder may submit~~ a copy of the certificate shall be submitted with the required fee in lieu of the renewal notice. A certificate holder shall keep the department informed of his current mailing address. Change of address shall be reported to the department in writing within 30 calendar days of the change.

B. If the renewal fee is not received by the department within 30 calendar days following the expiration date noted on the certificate, a late renewal fee of \$25 shall be required in addition to the regular renewal fee. If the certificate is renewed

after 30 days from the expiration date and prior to 180 days of the expiration date, the effective date of the renewal shall be the original renewal date. No certificate may be renewed more than
180 days following the date of expiration noted on the certificate.

C. The date a fee is received by the department of
Professional

~~and Occupational Regulation or its agent will be used to~~ shall
determine whether a ~~penalty~~ late renewal fee or the
requirement for reinstatement or reapplication is applicable.

D. ~~Suspended certificates are not renewable. A certificate~~
suspended by board order shall not be renewed until reinstated
by the board the period of suspension has ended and all terms
and conditions of the board's order have been met. Individuals
renewing certificates within 30 days after the suspension is
lifted will not be required to pay a late fee.

E. A revoked certificate cannot be renewed. An individual
whose certificate has been revoked must file a new application
and obtain approval of the board to recover certification.
Examination shall not be waived.

18 VAC 145-20-140. Reinstatement.

A. If the ~~certificate holder fails to renew the certificate~~
renewal fee and late renewal fee are not received by the
department within six months 180 days following his the
expiration date noted on the certificate, the certificate
holder shall no longer be considered a certificate holder and
will be required to apply for certificate reinstatement. The
applicant ~~will be required to show the board that he meets~~
shall meet the current eligibility standards for certification
as a professional soil scientist. The applicant may apply by

examination or by reciprocity. The board may also require reexamination. The application fee for reinstatement shall be ~~an amount equal to~~ include the regular renewal fee plus the ~~\$200 penalty~~ reinstatement fee.

B. ~~After 36 months from the date of expiration~~ If the reinstatement fee is not received by the department within 360 days following the expiration date noted on the certificate, the applicant ~~must~~ shall apply as a new applicant, meet all current education and, experience, and examination requirements ~~and pass the current examination~~ as may be required by the board.

~~18 VAC 145-20-150. Reissuance of certificate. (Repealed)~~

~~An individual whose certificate has been revoked must file a new application and obtain approval of the board to regain certification. Reexamination shall be required.~~

18 VAC 145-20-151. Fees.

Checks or money orders shall be made payable to the Treasurer of Virginia. All fees required by the board are nonrefundable. In the event that a check, money draft or similar instrument for payment of a fee required by statute or regulation is not honored by the bank or financial institution named, the applicant or regulant shall be required to remit

fees sufficient to cover the original fee, plus the additional processing charge specified below:

<u>Fee Type</u>	<u>When due</u>	<u>Amount due</u>
<u>New application</u>	<u>with application</u>	<u>\$150</u>
<u>Examination fee</u>	<u>upon approval for exam</u>	<u>\$150</u>
<u>Reexamination fee</u>	<u>Upon request to be rescheduled for exam</u>	<u>\$75 for each part</u>
<u>Renewal fee</u>	<u>With renewal card</u>	<u>\$175</u>
<u>Late renewal fee</u>	<u>30 days after date of expiration</u>	<u>\$25</u>
<u>Reinstatement fee</u>	<u>180 days after date of expiration</u>	<u>\$200</u>
<u>Dishonored check fee</u>	<u>With replacement check</u>	<u>\$25</u>

PART IV.

STANDARDS OF PRACTICE AND CONDUCT.

18 VAC 145-20-160. Professional conduct.

A certified professional soil scientist:

1. Shall not submit any false statements, make any misrepresentations or fail to disclose any facts requested concerning any application for certification or recertification.
2. Shall not engage in any fraud ~~or~~, deceit or misrepresentation in advertising, in soliciting or in providing professional services.
3. Shall not knowingly sign, stamp, or seal any plans, drawings, blueprints, surveys, reports, specifications, maps or other documents not prepared or reviewed and approved by the certificate holder.
4. Shall not knowingly represent a client or employer on a project on which ~~he~~ the certificate holder represents or has represented another client or employer without making full disclosure thereof.
5. Shall express a professional opinion only when it is founded on adequate knowledge of established facts at issue and based on a background of technical

competence in the subject matter.

6. Shall not knowingly misrepresent factual information in expressing a professional opinion.
7. Shall immediately notify the client or employer and the appropriate regulatory agency if ~~his~~ the certificate holder's professional judgment is overruled and not adhered to ~~in the use of all reasonable means necessary to advise~~ when advising appropriate parties of any circumstances of a substantial threat to the public health, safety, or welfare.
8. Shall exercise reasonable care when rendering professional services and shall apply the technical knowledge, skill and terminology ordinarily applied by practicing soil scientists.

18 VAC 145-20-170. Grounds for suspension, revocation, denial of application, renewal or other disciplinary action.

- A. The board has the power to fine any certificate holder or to revoke or suspend any certificate at any time after a hearing conducted pursuant to the Administrative Process Act, §2.2-4000 et seq. of the Code of Virginia, when the person is found to have:

1. Committed fraud or deceit in obtaining or attempting to obtain certification.
- ~~2. Committed any violation, or cooperated with others in violating 18 VAC 145-20-160 of the Standards of Practice and Conduct, or any other regulations of the board, or governing statutes of the board.~~
- ~~3.~~2. Performed any act in the practice of his profession likely to deceive, defraud or harm the public.
- ~~4.~~3. Committed any act of gross negligence, incompetence, or misconduct in the practice of soil science.
- ~~5.~~4. Been convicted of a felony under the terms specified in § 54.1-204 of the Code of Virginia.

The board may suspend or revoke a certificate or may fine a certificate holder when the certificate holder has been found to have violated or cooperated with others in violating any provisions of Chapter 22 (§ 54.1-2200 et seq.) of Title 54.1 of the Code of Virginia or any regulation of the board.

- B. The board may, in its discretion, refuse to grant, renew or
reinststate a certificate of any person for any of the
reasons
specified in subsection A of this section, Section 54.1-

2200 et seq. of the Code of Virginia and this chapter.

I certify that this regulation is full, true and correctly dated.

*Karen W. O'Neal, Assistant Director
Department of Professional and Occupational Regulation/
Board for Professional Soil Scientists*

Date