

## Chapter A-E 10

### PROFESSIONAL GEOLOGIST REGISTRATION

A-E 10.01	Authority and purpose
A-E 10.02	Applications
A-E 10.03	Experience as a professional geologist

A-E 10.04	Education
A-E 10.05	Examinations
A-E 10.06	Application contents

**A-E 10.01 Authority and purpose.** The rules in this chapter are adopted under authority in ss. 15.08 (5) (b), 227.11, 443.037, 443.09 and 443.10, Stats. The purpose of the rules in this chapter is to interpret basic education, experience and examination requirements for registration as a professional geologist as specified in ss. 443.037, 443.09 and 443.10, Stats.

**History:** Cr. Register, June, 1995, No. 474, eff. 7-1-95.

**A-E 10.02 Applications.** An application for registration as a professional geologist is available upon request to the board of office located at 1400 East Washington Avenue, P.O. Box 8935, Madison, Wisconsin 53708. An applicant who files an application but does not comply with a request for information related to the application within one year from the date of the request shall file a new application.

**History:** Cr. Register, June, 1995, No. 474, eff. 7-1-95.

**A-E 10.03 Experience as a professional geologist.**

(1) To qualify as satisfactory professional geologic work for the purposes of s. 443.037, Stats., an applicant's experience shall include the application of accepted principles in the practice of geology and shall demonstrate an applicant's progressive development of competence to practice as a professional geologist. The experience shall be acquired in the areas of the practice of geology listed in sub. (2) (a) to (m) or in other areas of the practice of geology which in the opinion of the board provide the applicant with a knowledge of principles and data related to the practice of geology at least equivalent to that which would be acquired by experience in the areas of practice listed. Experience in every listed area is not required.

(2) Areas of experience in the practice of professional geology include:

(a) Mineralogy, including identification of minerals and mineral assemblages, the determination of physical and chemical properties of rocks, and determination of probable genesis and sequence of mineral assemblages.

(b) Petrography or petrology, including identification and classification of major rock types, determination of physical and chemical properties of rocks, and determination of probable genesis and sequence of rock formation.

(c) Geochemistry, including evaluation of geochemical data, and construction of geologic models based on geochemical analyses.

(d) Stratigraphy or historical analysis, including identification of rock sequences, establishment of the relative position of rock units, determination of the ages of rock units, interpretation of depositional environments and geologic histories, performance of facies analyses, and establishment of stratigraphic classifications.

(e) Structural geology, including identification of structural features and their interrelationships, determination of the orientation of structural features, performance of qualitative and quantitative structural analyses, correlation of separated structural features, and interpretation of structural features and tectonic histories.

(f) Paleontology, including determination of estimated relative geologic ages of rocks, identification of fossils and fossil assem-

blages, correlation of rock biostratigraphy, and paleoecological interpretation.

(g) Geomorphology, including identification of landforms, performance of geomorphic field investigations, determination of geomorphic processes and the development and age relationships of landforms and soils, and interpretation of geomorphic field data.

(h) Geophysics, including performance of geophysical investigations in the field, performance of geological interpretations of geophysical data, and identification of potentially hazardous geological conditions by use of geophysical techniques.

(i) Hydrogeology, including design and interpretation of hydrologic and hydrogeologic testing programs, utilization of physical and chemical data to evaluate hydrogeologic conditions, development and interpretation of groundwater geologic maps and sections, application of geophysical methods to analyze hydrogeologic conditions, determination of the physical and chemical properties of aquifers and vadose zones, determination of groundwater resources and quality, design of wells and drilling programs, development of groundwater resource management plans, and development of remedial action programs.

(j) Engineering geology, including geologic interpretation for engineering design, identification and interpretation of potential seismic and geologic hazards, development and interpretation of engineering geology maps and sections, evaluation of materials resources, establishment of site selection and evaluation criteria, design and implementation of field and laboratory programs, and provision of sample soils for geologic analysis and materials properties testing.

(k) Mining geology, including formulation of exploration programs, implementation of field investigations on prospects, performance of geologic interpretations for mineral reserves, performance of economic analyses and appraisals, provision of geologic interpretations for mineral resource, mine development, and mine reclamation or abandonment.

(l) Petroleum geology, including formulation of exploration plans, implementation of field investigations on prospects, performance of geologic interpretations of physical properties and hydrocarbon reserves, performance of petroleum economic analyses and appraisals, and provision of geologic interpretations for development and abandonment of hydrocarbon reservoirs.

(m) Glacial geology, including understanding glacial processes, deposits, landforms and environments; identification and classification of glacial sediment; performance of facies analyses; identification of glacial sequences and establishment of stratigraphic classifications; determination of glacial histories; and development and interpretation of glacial geologic maps and sections.

(3) Not more than one year of satisfactory experience credit may be granted for any calendar year.

**History:** Cr. Register, June, 1995, No. 474, eff. 7-1-95.

**A-E 10.04 Education.** (1) In satisfaction of the education requirement under s. 443.037, Stats., the board shall accept a bachelor's degree in geology, or a bachelor's degree reflecting that the applicant has completed at least 30 semester hours or 45

quarter hours of course credits in geology of a variety and nature sufficient to constitute a major in geology, granted by a college or university accredited by a regional accrediting agency approved by the state board of education in the state in which the college or university is located, or accredited by a Canadian accrediting agency satisfactory to the board.

(2) If the degree is from an educational institution not meeting the requirements of sub. (1), the applicant must provide an official evaluation by a transcript evaluation service acceptable to the board which shows that the degree is equivalent to a bachelor's degree in geology or a bachelor's degree with a major in geology meeting the requirements under sub. (1).

History: Cr. Register, June, 1995, No. 474, eff. 7-1-95.

**A-E 10.05 Examinations.** (1) **SCOPE OF WRITTEN EXAMINATIONS.** After December 31, 1995, all applicants for initial registration as a professional geologist shall pass both the fundamentals of geology and the principles and practice of geology examinations of the association of state boards of geology.

(2) **REQUIREMENTS FOR ENTRANCE TO EXAMINATIONS.** (a) To be eligible to take the examinations required under this section, an applicant under s. 443.037 (2) (a), Stats., shall have met the requirements under s. 443.037 (1), Stats., and shall have done either of the following:

1. Completed at least 4 years of professional experience in geologic work of a character satisfactory to the board, at least 1 year of which must have been performed under the supervision of a person who is at the time of application registered as a professional geologist under this chapter or who, during the period of supervised experience, was registered as a professional geologist in another state, territory or possession of the United States or in another country that has registration requirements for professional geologists that are not lower than the requirements for registration under this chapter.

2. Have been awarded a postgraduate degree in geology, geophysics, geochemistry, hydrogeology, engineering geology, geotechnical engineering or a related geological science granted by a college or university accredited by a regional accrediting agency approved by the state board of education in the state in which the college or university is located, or accredited by a Canadian accrediting agency satisfactory to the board, and have completed at least 3 years of professional experience in geologic work of a character satisfactory to the board which demonstrates that the applicant is qualified to assume responsible charge of geologic work.

(b) To be eligible to take the examinations required under this section, an applicant under s. 443.037 (2) (b), Stats., shall have met the requirements under s. 443.037 (1), Stats., and shall have done either of the following:

1. Completed at least 6 years of professional experience in geologic work of a character satisfactory to the board which demonstrates that the applicant is qualified to assume responsible charge of geologic work.

2. Have been awarded a postgraduate degree in geology, geophysics, geochemistry, hydrogeology, engineering geology, geotechnical engineering or a related geological science granted by a college or university accredited by a regional accrediting agency approved by the state board of education in the state in which the college or university is located, or accredited by a Canadian accrediting agency satisfactory to the board, and have completed at least 5 years of professional experience in geologic work of a character satisfactory to the board which demonstrates that the applicant is qualified to assume responsible charge of geologic work.

(3) **APPLICATION FOR EXAMINATION.** An applicant for initial registration shall file an application for examination with the board not less than 2 months before the scheduled date of the examination.

(4) **EXAMINATION AND REFUND FEES.** The fee for the examinations for professional geologists, and the requirements for refund of fees are specified in s. 440.05, Stats., and ch. RL 4, respectively.

(5) **PLACE AND TIME OF EXAMINATIONS.** The examinations required by this section shall be held at sites and on dates designated by the board.

(6) **EXAMINATION REVIEW.** (a) Any applicant for a professional geologist examination may review questions on any part of an examination failed by the applicant if the request is received within one year from the date of the examination, as specified in s. 443.09 (6), Stats.

(b) Failing candidates shall be notified of the procedure to schedule a review of the appropriate examination parts. The applicant may take notes on the examination questions reviewed. No notes may be retained by the applicant following the review. The review may not take place within 30 days prior to a scheduled examination. If the section confirms the failing status following its review, the application shall be deemed incomplete, and the applicant may be reexamined under sub. (7).

(7) **REEXAMINATION.** An applicant failing an examination may be reexamined, except that after failure of 3 reexaminations, the board shall require a one-year waiting period before further reexamination.

History: Cr. Register, June, 1995, No. 474, eff. 7-1-95; am. (6) (b), Register, March, 1996, No. 483, eff. 4-1-96.

**A-E 10.06 Application contents.** An application for registration as a professional geologist shall include:

(1) Official transcripts of graduate and undergraduate training, properly attested to by the degree granting institution and submitted by the institution directly to the board establishing that the applicant has been granted a bachelor's degree in geology or a bachelor's degree with a geology major meeting the requirements under s. 443.037 (1), Stats., granted by a college or university accredited by a regional accrediting agency approved by the state board of education in the state in which the college or university is located, or accredited by a Canadian accrediting agency satisfactory to the board.

(2) A chronological history of the applicant's employment or other qualifying experience in satisfaction of s. 443.037, Stats.

(3) For applicants applying under s. 443.037 (2) (a), Stats., a completed "supervised geologic experience" form completed by an individual who has firsthand knowledge of the applicant's supervised experience relating to professional geology and who is one of the following:

(a) A professional geologist registered in this state.

(b) A professional geologist registered in another licensing jurisdiction that has registration requirements not lower than the requirements for registration in this state.

(c) A person who the board determines is qualified to have responsible charge of geologic work.

(4) For applicants applying under s. 443.037 (2) (b), Stats., submission of at least 3 "peer evaluation" forms satisfactory to the board completed by registered professional geologists who have had professional contact with the applicant's practice and who certify that the applicant is qualified to assume responsible charge of geologic work.

(5) References from at least 5 individuals, at least 3 of whom shall be professionally competent to evaluate the applicant's practice and, after December 31, 1995, at least one of whom shall be registered as a professional geologist in this state.

(6) The fee required under s. 440.05 (1), Stats.

(7) For applicants previously licensed in another state, territory or possession of the United States or in another country, verification of the applicant's licensure in the licensing jurisdiction of original licensure or, if the applicant has permitted his or her registration in the jurisdiction of original licensure to lapse, verification of licensure in the licensing jurisdiction where the applicant

is currently licensed and where the applicant was last engaged in the practice of professional geology.

**(8)** For applicants who have a pending criminal charge or have been convicted of a crime, all related information necessary for the board to determine whether the circumstances of the pending criminal charge or criminal conviction are substantially related to the circumstances of the practice of geology.

**(9)** Any additional data, exhibits or references showing the extent and quality of the applicant's experience that may be required by the professional geologist section.

**(10)** For applicants applying under s. 443.037 (2) (a), Stats., af-

ter December 31, 1995, evidence of successful completion of the fundamentals of geology examination and the principles and practice of geology examination.

**(11)** For applicants applying under s. 443.037 (2) (b), Stats., evidence of successful completion of the fundamentals of geology examination and the principles and practice of geology examination.

**Note:** Application forms, including the "supervised geologic experience" form and the "peer evaluation" form are available on request to the board office, 1400 East Washington Avenue, P.O. Box 8935, Madison, Wisconsin 53708.

**History:** Cr. Register, June, 1995, No. 474, eff. 7-1-95.