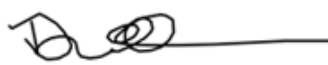






TO: The Honorable the Members of the Board of Regents

FROM: Douglas E. Lentivech


SUBJECT: Proposed Amendment of Section 29.3 of the Rules of the Board of Regents and Parts 52 and 68 of the Regulations of the Commissioner of Education Relating to the Licensure of Professional Geologists, and Continuing Education for Land Surveyors

DATE: July 5, 2016


AUTHORIZATION(S):


SUMMARY

Issue for Decision (Consent Agenda)

Should the Board of Regents amend section 29.3 of the Rules of the Board of Regents, add a new section 52.46 to the Regulations of the Commissioner of Education, and amend Part 68 of the Regulations of the Commissioner of Education to amend section 68.1, renumber and add new sections 68.7, 68.8, and 68.9, and renumber and amend sections 68.10 through 68.15 relating to the licensure of professional geologists, and also amend renumbered section 68.15 relating to continuing education for land surveyors?

Reason for Consideration

Required by State statute (L. 2015, Ch. 9, L. 2014, Ch. 475 and L. 2014, Ch. 61).

Proposed Handling

The proposed amendment will be presented to the Full Board for adoption at the July 2016 Regents meeting. A copy of the proposed amendment is attached. Supporting materials are available upon request from the Secretary to the Board of Regents.

Procedural History

The proposed amendment was discussed by the Professional Practice Committee at the April 2016 Board of Regents meeting. A Notice of Proposed Rule Making was published in the State Register on May 4, 2016 for a 45-day public comment period. The Department received comments from six separate commenters. An Assessment of Public Comment is attached. No changes to the proposed amendment are recommended at this time.

Background Information

Chapter 475 of the Laws of 2014 amended Article 145 of the Education Law to establish and define the practice of the profession of geology. Chapter 9 of the Laws of 2015 amended Chapter 475 to make changes necessary to the implementation of Chapter 475.

The purpose of Chapter 475 is to establish the new profession of geology and to establish the licensure requirements for professional geologists to perform geological work. Chapter 475 defines the practice of a professional geologist as performing professional service such as researching, investigating, consulting and geological mapping, describing the natural processes that act upon the earth's materials, predicting the probable occurrence of natural resources, predicting and locating natural or human-induced phenomena which may be useful or hazardous to humankind and recognizing, determining and evaluating geological factors, and the inspection and performance of geological work and the responsible supervision thereof in furtherance of the health, safety and welfare of the public.

Chapter 475 establishes the education, experience, examination, age, moral character and fee requirements for applicants seeking licensure as a professional geologist. It also provides for a grandparenting licensure pathway for individuals to qualify for a license as a professional geologist, without a written examination, if they satisfy specified education and experience requirements and submit an application to the Department within one year of the November 21, 2016 effective date of this provision of the statute. Although this pathway will expire on November 20, 2017, the licenses issued under it will not.

Chapter 61 of the Laws of 2014 extends the expiration date for the mandatory continuing education requirement for land surveyors from June 30, 2014 to June 30, 2024.

The proposed amendment of subdivision (a) of section 29.3 of the Rules of the Board of Regents adds the profession of geology to the list of design professions that are subject to its unprofessional conduct provisions.

The proposed addition of section 52.46 to the Regulations of the Commissioner of Education establishes the program registration requirements for professional geologist education programs. These requirements include registration and curriculum

requirements for programs offered in New York State that lead to licensure as a professional geologist. The proposed amendment requires professional geologist education programs to be a program in geological sciences or a substantially equivalent science as determined by the Department leading to a bachelor's degree or higher degree, which must require the following: (1) a minimum of six semester hours in college level mathematics beyond algebra and trigonometry, such as calculus, statistics, linear algebra, differential equations or their equivalent as determined by the Department; (2) a minimum of 15 semester hours or the equivalent as determined by the Department in a combination of at least two of the following sciences: (a) physics; (b) chemistry; (c) biology; or their equivalent as determined by the Department; and (3) a minimum of 30 semester hours in geological sciences coursework or the equivalent as determined by the Department, of which 24 semester hours must include at least one course from four of the following eight subject areas: (a) earth materials; (b) sedimentary geology; (c) engineering geology (geotechnology); (d) surficial and near-surficial geology; (e) hydrogeology; (f) geodynamics; (g) economic geology; (h) geological skills/applications; or (i) their equivalent as determined by the Department.

The proposed amendment of the title of Part 68 of the Regulations of the Commissioner of Education conforms the Commissioner's regulations to Chapter 475 by adding the profession of geology.

The proposed amendment of subdivision (b) of section 68.1 of the Regulations of the Commissioner of Education amends the name of the State Board to include the profession of geology.

The proposed amendment of sections 68.7 through 68.12 of the Regulations of the Commissioner of Education reflects the renumbering of these sections as sections 68.10 through 68.15, respectively.

The proposed addition of new sections 68.7, 68.8, and 68.9 of the Regulations of the Commissioner of Education establish the requirements for licensure, including professional education, experience, and examination requirements.

The proposed amendment of renumbered section 68.10 of the Regulations of the Commissioner of Education establishes the requirements for licensure by endorsement of out-of-state examination for professional geologists.

The proposed amendment of renumbered section 68.11 of the Regulations of the Commissioner of Education conforms the fee for limited permits to the statutory fee of \$105 and establishes requirements for 30 day and project specific limited permits for individuals, who are licensed in other jurisdictions, but unlicensed in New York State, who seek to provide geological services within this State. These requirements include, but are not limited to, the submission of the appropriate limited permit application to the Department and the required fee.

The proposed amendment of renumbered section 68.13 of the Regulations of the Commissioner of Education adds the profession of geology to the list of design professions that are subject to its seals provisions.

The proposed amendment of renumbered section 68.14 of the Regulations of the Commissioner of Education relating to continuing education for professional engineers amends the name of the State Board to include the profession of geology.

The proposed amendment of renumbered section 68.15 of the Regulations of the Commissioner of Education relating to continuing education for land surveyors amends the name of the State Board to include the profession of geology, amends the expiration date for the mandatory continuing education requirement for land surveyors from June 30, 2014 to June 30, 2024, and makes a technical correction.

Recommendation

It is recommended that the Board of Regents take the following action:

VOTED: That subdivision (a) of section 29.3 of the Rules of the Board of Regents be amended, section 52.46 of the Regulations of the Commissioner of Education be added, the title of Part 68 and subdivision (b) of section 68.1 of the Regulations of the Commissioner of Education be amended, section 68.7 of the Regulations of the Commissioner of Education be renumbered section 68.10 and a new section 68.7 be added, section 68.8 of the Regulations of the Commissioner of Education be renumbered section 68.11 and a new section 68.8 be added, section 68.9 of the Regulations of the Commissioner of Education be renumbered section 68.12 and a new section 68.9 be added, renumbered sections 68.10 and 68.11 of the Regulations of the Commissioner of Education be amended, the title of renumbered section 68.12 of the Regulations of the Commissioner of Education be amended, renumbered section 68.13 of the Regulations of the Commissioner of Education be amended, the title of renumbered section 68.14 of the Regulations of the Commissioner of Education be amended, subclause (7) of clause (b) of subparagraph (ii) of paragraph (3) of subdivision (c) of renumbered section 68.14 of the Regulations of the Commissioner of Education be amended, subdivision (i) of renumbered section 68.14 of the Regulations of the Commissioner of Education be amended, the title and subdivision (a) of renumbered section 68.15 of the Regulations of the Commissioner of Education be amended, subclause (7) of clause (b) of subparagraph (ii) of paragraph (2) of subdivision (c) of renumbered section 68.15 of the Regulations of the Commissioner of Education be amended, and subdivision (i) of renumbered section 68.15 of the Regulations of the Commissioner of Education be amended, as submitted, effective November 21, 2016.

Timetable for Implementation

If adopted at the July 2016 Regents meeting, the proposed rule will become effective on November 21, 2016, which is the effective date of the statute.

AMENDMENT TO THE RULES OF THE BOARD OF REGENTS AND THE
REGULATIONS OF THE COMMISSIONER OF EDUCATION

Pursuant to sections 207, 6504, 6507, 6509, 7200, 7204-a, 7204-b, 7206-b, 7205, 7207, 7208-a and 7210 of the Education Law, Chapters 61 and 475 of the Laws of 2014, and Chapter 9 of the Laws of 2015

1. Subdivision (a) of section 29.3 of the Rules of the Board of Regents is amended, effective November 21, 2016, to read as follows:

(a) Unprofessional conduct shall also include, in the professions of architecture and landscape architecture, engineering, [and] land surveying and geology:

(1) . . .

(2) . . .

(3) . . .

(4) . . .

(5) . . .

(6) . . .

(7) . . .

(8) . . .

(9) . . .

2. Section 52.46 of the Regulations of the Commissioner of Education is added, effective November 21, 2016, to read as follows:

§52.46 Professional Geologist.

In addition to meeting all the applicable provisions of this Part, to be registered as a program recognized as leading to licensure as a professional geologist, which meets the requirements of section 68.7 of this Title, the program shall:

(a) be a program in geological sciences or a substantially equivalent program as determined by the department, which leads to a bachelor's or higher degree, and includes the following:

(1) a minimum of six semester hours in college level mathematics beyond algebra and trigonometry, such as calculus, statistics, linear algebra, differential equations or their substantial equivalent as determined by the department;

(2) a minimum of 15 semester hours or the substantial equivalent as determined by the department in a combination of at least two of the following sciences:

(i) physics;

(ii) chemistry;

(iii) biology; or

(vi) their substantial equivalent as determined by the department;

and

(3) a minimum of 30 semester hours in geological sciences coursework or the substantial equivalent as determined by the department, of which 24 semester hours or their substantial equivalent shall include at least one course from four of the following eight subject areas:

(i) earth materials;

(ii) sedimentary geology;

(iii) engineering geology (geotechnology);

(iv) surficial and near-surficial geology;

(v) hydrogeology;

(vi) geodynamics;

(vii) economic geology;

(viii) geological skills/applications; or

(ix) their substantial equivalent as determined by the department.

3. The title of Part 68 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

ENGINEERING, [AND] LAND SURVEYING AND GEOLOGY

4. Subdivision (b) of section 68.1 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016 to read as follows:

(b) Prior to licensure the applicant must accrue 12 years of acceptable education/experience credit. One year of education/experience credit may be earned for each year of work experience acceptable to the State Board for Engineering, [and] Land Surveying and Geology pursuant to section 68.2 of this Part. Two years of education/experience credit may be earned for each year of professional engineering education obtained in a program leading to a bachelor's degree in engineering and accredited by an acceptable accrediting agency which specializes in the fields of engineering or in a program equivalent to such an accredited professional engineering program.

5. Section 68.7 of the Regulations of the Commissioner of Education is renumbered section 68.10 and a new section 68.7 is added, effective November 21, 2016, to read as follows:

§68.7 Professional study for professional geologists.

(a) As used in this section, acceptable accrediting agency shall mean an organization accepted by the department as a reliable authority for the purpose of accrediting geological sciences, engineering or other science programs, as having reasonable accreditation standards, and as an organization that applies its criteria for granting accreditation of programs in a fair, consistent, and nondiscriminatory manner.

(b) To meet the professional education requirement for licensure as a professional geologist, the applicant shall present satisfactory evidence of:

(1) holding a bachelor's degree awarded upon successful completion of a bachelor's degree program in geological sciences registered as leading to licensure pursuant to section 52.46 of this Title or accredited by an acceptable accrediting agency, or a bachelor's degree program that is substantially equivalent to such a registered program as determined by the department; or

(2) holding a bachelor's degree awarded upon successful completion of a bachelor's degree program in a related science or engineering and a master's or doctoral degree awarded upon successful completion of a master's or doctoral degree program in geological sciences that satisfies the requirements of section 52.46 of this Title, or a bachelor's degree and a master's or doctoral degree from programs that are substantially equivalent to such programs as determined by the department; or

(3) twelve years of experience acceptable to the State Board for Engineering, Land Surveying and Geology pursuant to paragraph (4) of subdivision (a) of section 68.8 of this Part.

(c) The department may accept completion of the following in lieu of not more than one year of acceptable experience:

(1) holding a master's or doctoral degree awarded upon successful completion of a master's or doctoral degree program in geological sciences following successful completion of either a licensure qualifying bachelor's program pursuant to section 52.46 of this Title or accredited by an acceptable accrediting agency, or a bachelor's degree program that is substantially equivalent to such a registered or accredited program as determined by the department; or

(2) holding a bachelor's degree awarded upon successful completion of a bachelor's degree program in a related science or engineering and a master's or doctoral degree awarded upon successful completion of a master's or doctoral degree program in geological sciences that satisfies the requirements of section 52.46 of this Title, or a bachelor's and master's or doctoral degree from programs that are substantially equivalent to such programs as determined by the department.

6. Section 68.8 of the Regulations of the Commissioner of Education is renumbered section 68.11, and a new section 68.8 is added, effective November 21, 2016, to read as follows:

§68.8 Experience acceptable for licensure as a professional geologist.

(a) Practical experience in geological work satisfactory to the board shall be verified in a manner acceptable to the board and shall:

(1) encompass a broad range of geological subdisciplines;

(2) demonstrate comprehensive understanding of geological principles and concepts, as well as the ability to apply those principles and concepts to the practical solution of geological problems or issues;

(3) demonstrate progressive professional practice beyond data collection, routine sampling, laboratory work or geological drafting, that requires independent judgment, competency, and accountability such that the applicant is qualified to assume responsible charge of geological work; and

(4) include at least five years of professional experience, after successful completion of the education requirements set forth in paragraph (1) of subdivision (b) of section 68.7; or at least four years of professional experience, after successful completion of the education requirements set forth in paragraph (2) of subdivision (b) of section 68.7 or paragraphs (1) and (2) of subdivision (c) of section 68.7; or twelve years

of experience as set forth in paragraph (3) of subdivision (b) of section 68.7 that was either:

(i) under the supervision of a licensed professional geologist;

(ii) under the supervision of a geologist or engineer, whom the board recognizes as qualified to have responsible charge of geologic work; or

(iii) entailed the applicant being in responsible charge of geological work as described in paragraphs (1), (2) and (3) of subdivision (a) of this section.

(b) Exception to the practical experience in geological work requirements. In lieu of the practical experience in geological work requirements set forth in subdivision (a) of this section, the board may accept research in, or the teaching of, geological sciences at the college or university level as qualifying practical experience in geological work, if, in the judgment of the board, the research or teaching is comparable to the practical experience obtained in the practice of geology.

7. Section 68.9 of the Regulations of the Commissioner of Education is renumbered section 68.12, and a new section 68.9 is added, effective November 21, 2016, to read as follows:

§68.9 Licensing examinations for geology.

(a) The licensing examination shall consist of:

(1) fundamentals of geology; and

(2) practice of geology.

(b) The grade retention provisions of section 59.5(f) of this Title shall not be applicable to geology examinations.

(c) Passing score. The passing scores for the examinations for licensure as a professional geologist shall be determined by the department, in consultation with the State Board for Engineering, Land Surveying and Geology.

(d) An applicant for admission to the fundamentals of geology examination shall:

(1) be within 20 credits of graduation from a bachelor's degree program in geological sciences registered as leading to licensure pursuant to section 52.46 of this Title, or accredited by an acceptable accrediting agency, or a bachelor's degree program that is substantially equivalent to such a registered or accredited program as determined by the department; or

(2) hold a bachelor's degree from a bachelor's degree program in a related science or engineering and be in the last semester of a master's or doctoral degree program in geological sciences that satisfies the requirements of section 52.46 of this Title, or hold a bachelor's degree and a master's or doctoral degree from programs that are substantially equivalent to such programs as determined by the department; or

(3) have completed eight years of experience acceptable to the State Board for Engineering, Land Surveying and Geology pursuant to section 68.8 of this Part.

(e) An applicant for admission to the practice of geology examination shall:

(1) have completed the education and experience requirements set forth in sections 68.7 and 68.8 of this Part; or

(2) have completed 12 years of experience acceptable to the State Board for Engineering, Land Surveying and Geology pursuant to section 68.8 of this Part.

8. Renumbered section 68.10 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

§68.[7]10 Licensure by endorsement of out-of-state examination.

The department may license an applicant who meets all the requirements for licensure in New York State, except examination and has been issued a license or certificate to practice professional engineering, [or] land surveying or professional geology issued to him or her upon written examination by a legally constituted board of

examiners in any other state or political subdivision of the United States, provided that the examination for such license or certificate was the equivalent of the examination required in this State at the time it was issued.

9. Renumbered section 68.11 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

§68.~~8~~11 Limited permits.

(a) In accordance with section 7207(1) of the Education Law and upon recommendation of the board, the department may issue to an engineer who is not a resident of this State and having no established place of practice in this State a limited permit to practice engineering solely in connection with a single specified project and subject to the same registration and revocation restrictions as a license, provided that such applicant submits:

(1) . . .

(2) . . .

(3) . . .

(4) payment of a permit fee of \$~~60~~105 and, in addition, payment of the statutory registration fee.

(b) In accordance with section 7207(2) of the Education Law, the department may issue a limited permit to practice as a professional engineer, or land surveyor or professional geologist in this State, when such practice does not aggregate more than 30 days in any calendar year, to a person not a resident of this State and having no established place of practice in this State, provided that such applicant submits:

(1) . . .

(2) written confirmation, submitted to the department by the appropriate licensing authority, that the applicant is legally qualified to practice as a professional engineer, or

[or] land surveyor or professional geologist or the equivalent in his or her own state or country; and

(3) payment of a permit fee of \$[60]105.

(c) In accordance with section 7207(3) of the Education Law and upon recommendation of the board, the department may issue to a geologist who is not a resident of this State and having no established place of practice in this State a limited permit to practice geology solely in connection with a single specified project and subject to the same registration and revocation restrictions as a license, provided that such applicant submits:

(1) a completed application form, including:

(i) the applicant's current residential and employment addresses;

(ii) a description of the project for which the limited permit is requested; and

(iii) a detailed description of experience satisfactory to the board and of a nature related to the project in this State for which the limited permit is requested.

(2) at least two satisfactory certifications as to the character and qualifications of the applicant submitted to the department by licensed professional geologists, at least one of whom shall be a resident of this State;

(3) written confirmation, submitted to the department by the appropriate licensing authority, that the applicant is legally qualified to practice as a professional geologist or its equivalent in his or her state or country; and

(4) payment of a permit fee of \$105 and payment of the statutory registration fee.

10. The title of renumbered section 68.12 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016 to read as follows:

§68.912 Scope of practice by exempt persons.

11. Renumbered section 68.13 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

§68.[10]13 Seals.

For those applicants initially applying for licensure on or after July 1984, seals used by licensed professional engineers, [and] land surveyors and professional geologists shall be circular in shape, approximately 1 $\frac{3}{4}$ inches in diameter, bearing the legend at the top of the outer band, "STATE OF NEW YORK" and at the bottom "LICENSED PROFESSIONAL ENGINEER" or "LICENSED LAND SURVEYOR" or "LICENSED PROFESSIONAL ENGINEER AND LAND SURVEYOR" or "LICENSED PROFESSIONAL GEOLOGIST" as the case may be. In the circle above the Great Seal of New York shall be shown the name of the licensee, and below the Great Seal the license number with no other letters or numbers.

12. The title of renumbered section 68.14 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

§68.1[1]4 Continuing education for professional engineers.

13. Subclause (7) of clause (b) of subparagraph (ii) of paragraph (3) of subdivision (c) of renumbered section 68.14 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

(c) Mandatory continuing education requirement.

(1) . . .

(2) . . .

(3) Acceptable continuing education. To be acceptable to the department, continuing education shall meet the requirements of this paragraph. Such continuing

education must be in the subjects prescribed in subparagraph (i) of this paragraph and be the types of learning activities prescribed in subparagraph (ii) of this paragraph.

(i) . . .

(ii) Types of learning activities. Acceptable continuing education shall be the types of learning activities prescribed in this subparagraph and be subject to the limitations prescribed in this subparagraph.

(a) . . .

(b) Other educational activities. Acceptable continuing education shall be the following other educational activities, provided that no more than 18 hours of continuing education in a registration period shall consist of such other educational activities:

(1) . . .

(2) . . .

(3) . . .

(4) . . .

(5) . . .

(6) . . .

(7) serving on any committee or task force that addresses technical and/or regulatory issues relating to the professional practice of engineering, provided that such committee or task force has been established by a governmental entity, professional association, or other entity determined by the department, with assistance from the State Board for Engineering, [and] Land Surveying[,] and Geology, to be acceptable. Continuing education hours that may be credited for this activity shall be one hour of credit for every two hours of service while engaged in activities directly related to professional practice. To be acceptable for continuing education credit, such service must be certified in writing by an authorized individual within the committee or task force

and approved by the department. No more than nine hours of such continuing education may be included during each registration period.

14. Subdivision (i) of renumbered section 68.14 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

(i) Sponsor approval.

(1) . . .

(2) The department shall deem approved as a sponsor of continuing education to licensed professional engineers in the form of courses of learning or self-study programs:

(i) a sponsor of continuing education that is approved by the International Association for Continuing Education and Training (IACET), or the Practicing Institute of Engineering, or the American Institute of Architects Continuing Education System (AIA/CES), or an equivalent organization determined by the department with assistance from the State Board for Engineering, and Land Surveying and Geology to have adequate standards for approving sponsors of continuing education for professionals regulated by Title VIII of the Education Law that include but are not limited to standards that are equivalent to the standards prescribed in clauses (3)(ii)(a), (c) and (d) of this subdivision; or

(ii) . . .

(3) Department review of sponsors.

(i) . . .

(ii) Organizations desiring to offer courses of learning or self-study programs based upon a department review under this paragraph shall submit, with the fee as set forth in subdivision (j) of this section, an application for advance approval as a sponsor

at least 90 days prior to the date of the commencement of such continuing education that documents that the organization:

(a) . . .

(b) . . .

(c) provides course instructors who are qualified to teach the courses which will be offered, including but not limited to, faculty of a college of engineering accredited by an acceptable accrediting agency; or instructors who are specially qualified authorities in engineering, as determined by the department with assistance from the State Board for Engineering, [and] Land Surveying[,] and Geology, to conduct such courses;

(d) . . .

(e) . . .

15. The title and subdivision (a) of renumbered section 68.15 of the Regulations of the Commissioner of Education are amended, effective November 21, 2016, to read as follows:

§68.1[2]5 Continuing education for land surveyors [(Effective until June 30, 2014)].

(a) General Provisions.

(1) Expiration date. In accordance with section 2 of chapter [135] 61 of the Laws of [2002] 2014, this section shall not be in effect on or after June 30, 20[1]24.

(2) . . .

16. Subclause (7) of clause (b) of subparagraph (ii) of paragraph (2) of subdivision (c) of renumbered section 68.15 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

(c) Mandatory continuing education requirement.

(1) . . .

(2) . . .

(i) . . .

(ii) Types of learning activities. Acceptable continuing education shall be the types of learning activities prescribed in this subparagraph and be subject to the limitations prescribed in this subparagraph.

(a) . . .

(b) Other educational activities. Acceptable continuing education shall be the following other educational activities, provided that no more than eight hours of continuing education in a registration period shall consist of such other educational activities, including but not limited to self-study programs:

(1) . . .

(2) . . .

(3) . . .

(4) . . .

(5) . . .

(6) . . .

(7) serving on any committee or task force that addresses technical and/or regulatory issues relating to the professional practice of land surveying, provided that such committee or task force has been established by a governmental entity, professional association, or other entity determined by the department, with assistance from the State Board for Engineering, [and] Land Surveying [,] and Geology, to be acceptable. Continuing education hours that may be credited for this activity shall be one hour of credit for every two hours of service while engaged in activities directly related to professional practice. To be acceptable for continuing education credit, such service must be certified in writing by an authorized individual within the committee or

task force and approved by the department. No more than nine hours of such continuing education may be included during each registration period.

17. Subdivision (i) of renumbered section 68.15 of the Regulations of the Commissioner of Education is amended, effective November 21, 2016, to read as follows:

(i) Sponsor approval.

(1) . . .

(2) The department shall deem approved as a sponsor of continuing education to licensed land surveyors in the form of courses of learning or self-study programs:

(i) a sponsor of continuing education that is approved by the International Association for Continuing Education and Training (IACET), or the Shaw Fund Continuing Education Approved Provider Program, or the Practicing Institute of Engineering, or the American Institute of Architects Continuing Education System (AIA/CES), or an equivalent organization determined by the department with assistance from the State Board for Engineering, [and] Land Surveying and Geology to have adequate standards for approving sponsors of continuing education for professionals regulated by title VIII of the Education Law that include but are not limited to standards that are equivalent to the standards prescribed in clauses (3)(ii)(a), (c) and (d) of this subdivision; or

(ii) . . .

(3) Department review of sponsors.

(i) . . .

(ii) Organizations desiring to offer courses of learning or self-study programs based upon a department review under this paragraph shall submit, with the fee as set forth in subdivision ([i]j) of this section, an application for advance approval as a sponsor

at least 90 days prior to the date of the commencement of such continuing education that documents that the organization:

(a) . . .

(b) . . .

(c) provides course instructors who are qualified to teach the courses which will be offered, including but not limited to, faculty of a college of land surveying accredited by an acceptable accrediting agency; or instructors who are specially qualified authorities in land surveying, as determined by the department with assistance from the State Board for Engineering, [and] Land Surveying [,] and Geology, to conduct such courses;

(d) . . .

(e) . . .

ASSESSMENT OF PUBLIC COMMENT

Since publication of a Notice of Proposed Rule Making in the May 4, 2016 State Register, the State Education Department received the following comments:

1. COMMENT:

A NY professional geology association expressed its support for the proposed rule and appreciation for being included, in an advisory role, in development of the concepts that led to it.

DEPARTMENT RESPONSE:

The Department appreciates the supportive comments as it works to protect the public and provide greater access to professional geological services by New Yorkers.

2. COMMENT:

The chair of the Geology Department of one NYS HE institution expressed support on behalf of his department for the required 30 hours of education in geological sciences, with specific requirements for 24 of the 30 hours in prescribed geological science subject areas, as providing students with a solid foundation for passing licensure examinations and having the breadth and depth to perform in their field. The commenter also expressed pleasure at the math and science cognate requirements as they believe these will ground students in statistics and natural sciences, and offer a pathway to licensure for students in less traditional subspecialties such as ecohydrogeology and paleobiology.

DEPARTMENT RESPONSE:

The Department appreciates the supportive comments as it works to protect the public and provide greater access to professional geological services to New Yorkers.

3. COMMENT:

One CUNY faculty member suggested that NY require courses in seismology, exploration geophysics, well logging and petroleum geology for licensure as there could be an advantage to NYS licensed geologists because their licenses might be recognized by reciprocity in other states with more geological activity, such as Pennsylvania, West Virginia, Ohio, Colorado, California, Texas, Utah, Montana and Wyoming.

DEPARTMENT RESPONSE:

In developing the educational requirements for licensure, the Department and the State Board for Engineering, Land Surveying and Geology (State Board) researched educational requirements in every state in the country. Balancing public protection against access to the profession, the Department and State Board selected educational criteria that are congruous with many states and the model offered by the National Association of State Boards of Geology (ASBOG), the professional association responsible for developing the examinations that are used for licensure purposes by member states. Of the nine states the commenter mentioned, three, Colorado, Montana, and Ohio, do not license geologists. In addition, six others do not specifically require the courses noted, for licensure in their states. It is reasonable to synthesize from this review that requiring these specific courses would not gain NY licensees an advantage in achieving licensure in the states listed as they are not currently required for those states' own licensees.

NY HE institutions may include these courses in their licensure qualifying geology education programs as the breadth of the requirements recommended by the Department and State Board allows for them, without prescriptively requiring them. Thus, no changes are necessary.

4. COMMENT:

A practicing geologist stated there should be no grandfathering period as it represents a disservice to public safety and to those professionals who have passed the ASBOG exams for licensure in other jurisdictions. The commenter further asserted that not all individuals seeking licensure share the same moral compass and ethics as those who have taken the ASBOG exam.

DEPARTMENT RESPONSE:

The grandfathering licensure pathway is required by statute. This pathway cannot be eliminated or changed absent a statutory change. This pathway allows individuals who have been providing geological services to the public to qualify for a license as a professional geologist, without a written examination, if they satisfy specified education and experience requirements and submit an application to the Department within one year of the November 21, 2016 effective date of this provision. Thus, no changes are necessary.

5. COMMENT:

The same practicing geologist states that the cognate math and science requirements should be phased in over several years. The commenter states that other states do not have the same math and science requirements. Further, the commenter notes that NYSED should require the SUNY system and private universities to adopt the licensure qualifying criteria into their geological science degree programs over the next decade. A second practicing geologist notes that his BA in Geological Sciences did not contain the math and science cognates, and they were completed in his graduate work.

DEPARTMENT RESPONSE:

In researching the educational requirements in other jurisdictions, the Department and State Board found many states that license geologists require that

most of the prescribed professional course work be obtained at the upper level in a bachelor or higher degree program. This means that these states do, in fact, require cognate math and science as this knowledge is necessary to complete the advanced professional course work, whether as an undergraduate or graduate student. The Department and State Board believe this is essential as practice within the field of geology frequently requires further specialization with advanced understanding in math and science. This serves to promote greater understanding by licensees and additional safeguards for the public.

The Department's role is not to require any HE institution to create licensure qualifying programs. Rather, its role is to set the standard for a licensure qualifying program to be met by those HE institutions that seek to offer licensure qualifying programs. In this way, the public will be informed of the educational standards for licensure qualifying programs and can select the type of program that most closely assists them in meeting their educational and professional goals. Thus, no changes are necessary.

6. COMMENT:

A commenter states that language in the proposed rule should be revised to include only "bachelor's or higher degree", to be consistent with the statute.

DEPARTMENT RESPONSE:

In an effort to recognize that NY is a gateway state, in that some NY professional geologist licensure applicants are educated on an international basis, it is necessary to add language that allows for documentation from other countries that award degrees and offer course work in formats other than the 4 year bachelor's program. Often advanced science and math courses are taken while still in the international high school, yet are comparable to the math and science courses taken in the first and

second years of college in the US system. To accommodate all eventualities, the language “or a substantially equivalent program” was added to the proposed rule so that the Department may evaluate internationally earned credits and make a determination regarding their equivalence to courses in licensure qualifying programs within NYS. The proposed rule’s language is consistent with the statute and the discretion it provides to the Commissioner in developing regulations regarding the education requirements for licensure as a professional geologist. Thus, no changes are necessary.

7. COMMENT:

The same commenter states that there is a discrepancy between the language in the new section 52.46, which refers to “a program ... which leads to a bachelor’s or higher degree” and the new section 68.7 (b) and (c) that discusses requirements for education. The commenter believes the statements do not show an understanding that the educational requirements may have been fulfilled either while earning the bachelor’s degree or higher degree or by some combination of both.

DEPARTMENT RESPONSE:

The commenter appears to have misunderstood the aforementioned section. The new section 68.7(b) delineates the various licensure pathways, via education and experience. Section 68.7 b (1) refers to pathway 1, where the applicant will graduate from a licensure qualifying program with a bachelor’s degree in geological sciences or a substantially equivalent program, OR has graduated from a licensure qualifying geological science program with a bachelor’s degree AND holds an advanced degree from a geological sciences program (pathway 2). Section 68.7 (b)(2) refers to an applicant who has graduated from a bachelor’s degree program in science or engineering or a substantially equivalent program AND holds an advanced degree in

geological sciences (pathway 3). Section 68.7 (b)(3) is pathway 4, an all-experience route to licensure requiring 12 years of work experience acceptable to the State Board. These pathways represent a consolidation of various routes available to applicants to become NY professional geologists. They maintain required educational content for a geologist to be competent, while acknowledging and crediting work experience that may sufficiently prepare the applicant to be successful on the ASBOG examination and in geology practice. Thus, no changes are necessary.

8. COMMENT:

The same commenter notes that some experience requirements set forth in the proposed rule go beyond the plain language of the statute. While acknowledging that rules routinely add detail to the statute, the commenter feels that the rule has overstepped that which the statute has authorized.

DEPARTMENT RESPONSE:

The commenter does not specify which requirements overstep the experience requirements in the statute. However, pursuant to Education Law §7206-b(1)(c), applicants for licensure must have at least five years practical experience acceptable to the State Board in appropriate geological work; up to one year of experience may be granted for an advanced degree (masters, doctorate or equivalent) in accordance with the Commissioner's Regulations. This statute gives the Department and State Board a significant amount of discretion in establishing the experience requirements for licensure. The proposed rule's experience requirements are consistent with the statute and the Department and State Board believe these requirements are crucial to the development of professional judgement and ethical behavior in the practice of all types of geology. Therefore, no changes are necessary.

9. COMMENT:

The same commenter supports the appropriately detailed definition of the practice of professional geology without being unduly prescriptive.

DEPARTMENT RESPONSE:

The Department appreciates the supportive comments as it works to protect the public and provide greater access to professional geological services to New Yorkers.

10. COMMENT:

The same commenter asserts that by stating “only a person licensed or otherwise authorized under this article shall practice geology” that individuals who “generally” meet the requirements, but not the “overly prescriptive” education/experience rules, will be threatened with loss of livelihood or unauthorized practice of a profession or use of a professional title. The commenter asserts that there should be an appeals process in place, similar to the one in 8 NYCRR 24.4 .

DEPARTMENT RESPONSE:

Section 24.4 of the Rules of the Board of Regents state that the Committee on the Professions may review and determine appeals for licensing determinations of the Department staff relating to education or experience requirements if the chairman of the committee determines that the appeal involves a substantial or novel question which should be reviewed by the committee. This rule applies to all professions under the Department’s jurisdiction, thus no changes are necessary.

11. COMMENT:

The same commenter states that the proposed rule should be revised to remove the statement that indicates experience must be completed after successful completion of the educational requirements. The commenter feels that practical experience earned under a qualified geologist or engineer prior to or while attending a university program in

geology, should be counted in the four to five years of experience acceptable to the Board.

DEPARTMENT RESPONSE:

Section 68.8 of the proposed rule allows education/experience credit to be awarded for the degree(s) earned at a rate of roughly two years for each year of education completed in a bachelor's degree program. This credit takes into account that there may be summer work or experiences in the field that add context to that portion of educational courses recently completed. The Department and State Board believe that work experience gained after the educational degree is awarded needs to be at a level that prepares the applicant for accepting full responsibility for the geological work done. This is not possible while the applicant is still a student and has not yet completed the foundational studies upon which to base sound professional judgment. Work experience acceptable to the State Board is work experience that brings into play all the knowledge from the completed education and skills from paid time in the field, and demonstrates the applicants' ability to accept responsible charge, and exert sound decision-making capacity. Thus, no changes are necessary.