

# Regulatory Analysis Form

(Completed by Promulgating Agency)

**INDEPENDENT REGULATORY  
REVIEW COMMISSION**

(All Comments submitted on this regulation will appear on IRRC's website)

(1) Agency:

**Department of State, Bureau of Professional and Occupational Affairs**

(2) Agency Number: 16A

Identification Number: 4711

IRRC Number: 2926

(3) PA Code Cite:

**49 Pa. Code §§ 37.1, 37.31-37.33, 37.36-37.37, and 37.47- 37.49**

(4) Short Title:

**Qualifications for Licensure**

(5) Agency Contacts (List Telephone Number and Email Address):

Primary Contact: **Thomas A. Blackburn, Regulatory Unit counsel, Department of State;**  
**(717)783-7200; P.O. Box 2649, Harrisburg, PA 17105-2649; (717)787-0251; tblackburn@pa.gov**

Secondary Contact: **Cynthia K. Montgomery, Regulatory Counsel, Department of State**  
**(717)783-7200; P.O. Box 2649, Harrisburg, PA 17105-2649; (717)787-0251; cymontgome@pa.gov**

(6) Type of Rulemaking (check applicable box):

Proposed Regulation

Final Regulation

Final Omitted Regulation

Emergency Certification Regulation;

Certification by the Governor

Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

**Act 25 of 2010 amended section 4.4 of the Engineer, Land Surveyor and Geologist Registration Law (act) (63 P.S. § 151.4) to provide for a two-step licensing process for professional geologists, similar to those for professional engineers and land surveyors. This rulemaking implements that two-step process by providing for examination and certification of geologists in training. Additionally, this rulemaking conforms the Board's other regulations concerning qualification for licensure to current administrative practice and specifically identifies ABET as the accrediting body for U.S. engineering schools and provides that a graduate of a foreign school must have a professional evaluation to determine whether that education is equivalent.**

(8) State the statutory authority for the regulation. Include specific statutory citation.

**The rulemaking is proposed under Sections 4(b), 4(l), 4.2, 4.3, and 4.4 of the Act (63 P.S. §§ 151.4(b), 151.4(l), 151.2, 151.3, and 151.4).**

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

**The rulemaking is not specifically mandated by any federal or state law or court or federal regulation. However, the rulemaking is necessary to effectuate the licensure standards of the act.**

**In *Whymeyer v. State Reg. Bd. for Professional Engineers, Land Surveyors and Geologists*, 997 A.2d 1254 (Pa. Cmwlth. 2010), the court reversed the Board's denial of permission to sit for the fundamentals of engineering examination because the applicant had graduated from an engineering school that was not accredited by ABET. The Board had applied its regulation at § 37.1 (defining "engineering curriculum" as a minimum 4-year program "approved by a National accrediting association recognized by the Board") to conclude that ABET, as the only National accreditor of engineering programs known to the Board and an affiliate of the NCEES (of which the Board is required by statute to become a member), is the only acceptable accreditor; accreditation from the Middle State Commission or other regional accreditor of colleges is not sufficient. Against a challenge that the regulation is unconstitutionally vague, the court held that the Board applied the regulation in an unconstitutional manner by not looking beyond the lack of accreditation by ABET to independently determine whether the program should be approved by the Board. This rulemaking is intended to clarify that ABET is the only accreditor acceptable to the Board for U.S. engineering or land surveying programs.**

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

**The General Assembly recognized the compelling public interest in permitting certification of geologist-in-training, and those provisions of the rulemaking are required to implement the statutory amendments. The other provisions of the rulemaking, which conform the regulations to current administrative practice, will provide increased clarity to applicants and permit the Board to more straightforwardly administer and enforce the act and apply the Board's regulations.**

(11) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

**This rulemaking is not based upon any scientific data, studies, or references.**

(12) Describe who and how many people will be adversely affected by the regulation. How are they affected?

**Because the rulemaking would conform the Board's licensure qualification regulations to current administrative practice, and because the rulemaking would provide the opportunity for certification as geologist-in-training as an initial step in geologist licensure (but not require it), the Board does not believe that the proposed rulemaking would have any adverse effect.**

(13) List the persons, groups or entities that will be required to comply with the regulation. Approximate the number of people who will be required to comply.

**All applicants would be required to comply with the rulemaking. The Board has approximately 32,200 licensed professional engineers, 9,800 certified engineers-in-training, 2,800 licensed professional land surveyors, 200 certified land surveyors-in-training, and 2,600 licensed professional geologists.**

(14) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

**Under the amended act and the proposed rulemaking, geologists who have completed the required education may choose to wait until acquiring the necessary experience to apply to sit for both examinations and become licensed or may choose to sit for the fundamentals examination upon completing the education and be certified as a geologist-in-training and later sit for the professional examination upon acquiring the necessary experience and then become licensed. Because the Board would process two separate applications, those geologists who choose to obtain geologist-in-training certification prior to seeking licensure as a professional geologist would be required to pay the Board's portion of the examination application fee (\$50) twice.**

**Because the other provisions of the rulemaking conform the regulations to current administrative practice, there are no other costs or savings to the regulated community associated with compliance with the rulemaking.**

(15) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

**There are no costs or savings to local governments associated with compliance with the rulemaking.**

(16) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

**The Board would modify its application forms to allow for certification of geologists in training, as well as professional geologist licensure. The cost to do so would be almost minimal. Because the Board's fees (and the Board's portion of the fees charged by a testing service) are set solely to recover the cost of providing the service, the cost to the Board to process applications for certification as geologist-in-training would be covered by the additional fee. Because the rulemaking would otherwise conform the regulations to current administrative practice, no other actions would be required.**

**There are no other costs or savings to state government associated with implementation of the rulemaking.**

(17) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	<b>Current FY Year</b>	<b>FY +1 Year</b>	<b>FY +2 Year</b>	<b>FY +3 Year</b>	<b>FY +4 Year</b>	<b>FY +5 Year</b>
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>						
<b>Local Government</b>						
<b>State Government</b>						
<b>Total Savings</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>COSTS:</b>						
<b>Regulated Community</b>						
<b>Local Government</b>						
<b>State Government</b>						
<b>Total Costs</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>REVENUE LOSSES:</b>						
<b>Regulated Community</b>						
<b>Local Government</b>						
<b>State Government</b>						
<b>Total Revenue Losses</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

(17a) Provide the past three year expenditure history for programs affected by the regulation.

<b>Program</b>	<b>FY -3 (2007-08)</b>	<b>FY -2 (2008-09)</b>	<b>FY -1 (2009-10)</b>	<b>Current FY (2010-11)</b>
<b>Pa. State Reg. Bd. for Professional Engineers, Land Surveyors and Geologists</b>	<b>(projected) \$943,864</b>	<b>(projected) \$1,152,000</b>	<b>(budgeted) \$1,083,000</b>	<b>(budgeted) \$1,223,000</b>

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

**Any costs are minimal, and there are no identified adverse effects from compliance with the proposed rulemaking. The benefit of increased clarity and ease of application of the regulations, coupled with effectuation of the General Assembly's desire for geologist-in-training certification, outweighs any cost or adverse effect.**

(19) Describe the communications with and input from the public and any advisory council/group in the development and drafting of the regulation. List the specific persons and/or groups who were involved.

**In drafting a prior version of the proposed rulemaking, the Board solicited comments from the Pennsylvania Society of Professional Engineers, Professional Society of Land Surveyors, and Pennsylvania Council of Professional Geologists. These are the major organizations that represent the engineering, land surveying, and geology professions in Pennsylvania. With the passage of Act 25, the Board revised the draft provisions for geologist licensure to be analogous to the two-step process for engineers and land surveyors, maintaining the applicable substantive requirements. The Board continued to discuss this rulemaking at its public meetings in May and July, 2010.**

(20) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

**No alternative regulatory schemes were considered, because no other regulatory schemes would effectuate the act and its recent amendments.**

(21) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

**The rulemaking is not more stringent and does not overlap or conflict with any federal requirements.**

(22) How does this regulation compare with those of other states? How will this affect Pennsylvania's ability to compete with other states?

**Most jurisdictions, including Pennsylvania, pattern their engineer and land surveyor practice acts on the Model Law adopted by NCEES. The proposed rulemaking is consistent with the provisions of the Model Law.**

**This rulemaking would not put Pennsylvania at a competitive disadvantage with these other states.**

(23) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

**This rulemaking would not affect other regulations of the Board or other state agencies.**

(24) Submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

**This rulemaking would not require any additional recordkeeping or other paperwork for implementation.**

(25) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

**The Board has determined that there are no special needs of any subset of its applicants or licensees for whom special accommodations should be made.**

(26) Include a schedule for review of the regulation including:

- |   |                                    |
|---|------------------------------------|
| A. The date by which the agency must receive public comments:                               | <b><u>30 days after publ.</u></b>  |
| B. The date or dates on which public meetings or hearings will be held:                     | <b><u>N/A</u></b>                  |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | <b><u>Within 2 years publ.</u></b> |
| D. The expected effective date of the final-form regulation:                                | <b><u>Final promulgation</u></b>   |
| E. The date by which compliance with the final-form regulation will be required:            | <b><u>Effective date</u></b>       |
| F. The date by which required permits, licenses or other approvals must be obtained:        | <b><u>Effective date</u></b>       |

(27) Provide the schedule for continual review of the regulation.

**The Board continually reviews the efficacy of its regulations, as part of its annual review process under Executive Order 1996-1. The Board reviews its regulatory proposals at regularly scheduled public meetings, generally the third Wednesday of each odd-numbered month. More information can be found on the Board's website ([www.dos.state.pa.us/eng](http://www.dos.state.pa.us/eng)).**

FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE BUREAU

(Pursuant to Commonwealth Documents Law)

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality. Attorney General

Copy below is hereby certified to be a true and correct copy of a document issued, prescribed or promulgated by:

Copy below is approved as to form and legality. Executive or Independent Agencies.

BY: Angela Elliott  
(DEPUTY ATTORNEY GENERAL)

State Registration Board for Professional Engineers, Land Surveyors and Geologists  
(AGENCY)

BY: Andrew C. Clark

OCT 14 2011  
DATE OF APPROVAL

DOCUMENT/FISCAL NOTE NO. 16A-4711

AUG 4 2011  
DATE OF APPROVAL

DATE OF ADOPTION:

(Deputy General Counsel  
~~Chief Counsel,~~  
~~Independent Agency~~  
~~(Strike inapplicable title)~~)

BY: Robert C. Grubic  
Robert C. Grubic, PE

[ ] Check if applicable  
Copy not approved.  
Objections attached.

TITLE: Chairman  
(EXECUTIVE OFFICER, CHAIRMAN OR SECRETARY)

[ ] Check if applicable.  
No Attorney General approval  
or objection within 30 day  
after submission.

PROPOSED RULEMAKING

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF STATE  
BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS  
STATE REGISTRATION BOARD FOR PROFESSIONAL ENGINEERS,  
LAND SURVEYORS AND GEOLOGISTS

49 Pa. Code §§ 37.1-37.33, 37.36-37.37, 37.47-37.49  
QUALIFICATIONS FOR LICENSURE



The State Registration Board for Professional Engineers, Land Surveyors and Geologists (Board) proposes to amend §§ 37.1, 37.31 – 37.33, 37.36, 37.37, and 37.47 – 37.49, to read as set forth in Annex A.

### Effective Date

The proposed amendments would become effective upon publication of the final-form rulemaking in the *Pennsylvania Bulletin*.

### Statutory Authority

Section 4(l) of the Engineer, Land Surveyor and Geologist Registration Law (act) (63 P.S. § 151(l)) authorizes the Board to promulgate regulations that it deems necessary and proper for enforcement of the act.

### Background and Need for the Rulemaking

The act of May 12, 2010 (P.L. 192, No. 25) (Act 25) amended section 4.4 of the act (63 P.S. § 151.4) to provide for certification of geologists-in-training, in addition to licensure of professional geologists. This two-stage process is analogous to the two-stage processes for certification of engineers-in-training and licensure of professional engineers and for certification of surveyors-in-training and licensure of professional land surveyors. Additionally, in looking at and amending its regulations concerning the licensure process for geologists in response to Act 25, the Board also reviewed its regulations concerning the licensure process for engineers and land surveyors and concluded that it should also update those regulations to conform to current administrative practice.

### Description of Proposed Amendments

#### *§ 37.1 (relating to definitions)*

Section 37.1 defines words and phrases used in Chapter 37. In order to simplify the organizational structure of Chapter 37, the proposed rulemaking would delete the definitions of the following terms and incorporate their definitions, as revised, into the text of the one or two sections where the terms are used: “engineering curriculum,” “professional geologic work,” “progressive experience in engineering work,” “progressive experience in surveying work,” “progressive teaching experience,” “responsible position,” “similarly qualified engineer,” and “similarly qualified surveyor.” The Board proposes to incorporate these definitions in §§ 37.31, 37.36, 37.37 and 37.47, as applicable.

The proposed rulemaking would add a definition for “NCEES,” which is the acronym of the National Council of Examiners in Engineering and Surveying. NCEES is the National organization of licensing boards, and section 4(k) of the act (63 P.S. § 151(k)) authorizes the Board to be a member of NCEES. The proposed rulemaking would also add a definition for “ABET,” which is the acronym of the organization formerly known as the Accreditation Board of Engineering and Technology, Inc. ABET, an affiliate of NCEES, accredits undergraduate

engineering programs. Finally, the proposal would include a definition for "ASBOG", which is the acronym for the National Association of State Boards of Geology.

*§ 37.31 (relating to eligibility for certification or licensure, or both)*

Section 37.31 is a companion regulation to section 4.2 of the act (63 P.S. § 151.1), which sets forth the requirements for certification as an engineer-in-training (EIT) and licensure as a professional engineer. The proposed rulemaking would reorganize § 37.31; retitle it as "requirements for certification as an engineer-in-training and for licensure as a professional engineer" and provide updated interpretative guidance about the education and experience requirements for non-grandfather applicants for EIT certification and professional engineer licensure. Section 4.2 was added to the act by the act of December 19, 1990 (P.L. 782, No. 192) (Act 192). Act 192 provided that the requirements of section 4.2 applied to candidates who received qualifying academic degrees on or after June 30, 1994, or who began receiving qualifying experience on or after February 19, 1991. All other candidates would be evaluated according to requirements in existence as of February 18, 1991, the day prior to the effective date of Act 192. Those requirements would now be set forth in § 37.33 (relating to grandfather provision.)

The introductory paragraph of existing § 37.31 provides that a candidate for licensure as a professional engineer must pass the fundamentals of engineering examination (FE examination) and become certified as an EIT, and that a candidate who is certified as an EIT retains such status without time limitation until the candidate becomes licensed as a professional engineer. The proposed rulemaking would replace that introductory paragraph and provide that the requirements in § 37.31 apply to a candidate who received a qualifying academic degree or began obtaining qualifying experience by the dates set forth above.

Current § 37.31(1), subtitled "Engineer-in-training," provides that a candidate for certification as an EIT must meet qualifying education or experience requirements. Subparagraph (i), subtitled "Education," provides that qualifying education for an EIT candidate is graduation from an approved engineering curriculum of 4 or more years. "Engineering curriculum" is currently defined in § 37.1 as a curriculum of 4 or more years approved by a National accrediting association recognized by the Board. Because there are no other National organizations that accredit engineering programs, the Board has always intended this definition to encompass accreditation by ABET or its predecessors, but no others. Current § 37.1 also defines "engineering curriculum" in the case of a degree awarded by a foreign institution, as a curriculum of 4 or more years that a Board-recognized professional credentials evaluation service determines to be equivalent to a bachelor's degree from a college or university in the United States. Third- and fourth-year students in approved engineering programs within the United States are permitted to sit for the fundamentals of engineering examination, but they are not eligible for EIT certification until they provide proof of graduation. Subparagraph (ii), subtitled "Experience," provides that qualifying experience for an EIT candidate is 8 or more years of progressive experience in engineering work and knowledge, skill and education approximating that attained through graduation from an approved engineering curriculum. "Progressive experience in engineering work" in the context of EIT certification is currently defined in § 37.1 as experience of a grade and character that enables the candidate to learn

through practice the principles of mathematics and science attained through formal education.

The proposed rulemaking would revise § 37.31(1) to provide that a candidate for EIT certification shall be a person of good moral character and pass the FE examination. Good moral character is a prerequisite for licensure as a professional engineer under section 4(b) of the act (63 P.S. § 151(b)). Because EIT certification is a condition precedent to licensure, it follows that an EIT candidate be a person of good moral character. The proposed rulemaking would further provide that a candidate may not be admitted to the FE examination without possessing one of the qualifications set forth in subparagraphs (i)-(iii). The proposed rulemaking would revise § 37.31(1)(i) to provide that a candidate may qualify for the FE examination through graduation from an undergraduate engineering program in the United States approved by ABET, or from a foreign undergraduate engineering program approved by ABET's Engineering Credentials Evaluation International (ECEI) or by NCEES's Center for Professional Engineering Education Services (CPEES) as substantially equivalent to ABET approval. A federation of professional and technical societies, ABET is a Nationally recognized accrediting body that accredits undergraduate programs offered by colleges and universities in the United States in the areas of applied science, computing, engineering and technology. The Board, like engineering licensing bodies in other states, relies on ABET accreditation in determining the quality of undergraduate engineering programs in the United States. Although ABET does not accredit engineer programs offered in other countries, it has entered into a number of mutual recognition agreements that recognize the substantial equivalency of engineering programs in other countries. NCEES, the national umbrella group of state licensing boards for engineers and land surveyors, is one of the member societies of ABET, and its predecessor was one of the founders of the original predecessor of ABET. ABET's subsidiary, ECEI, and NCEES's affiliate, CPEES, both evaluate the academic qualifications of engineering candidates educated outside the United States against prescribed substantial equivalency criteria. The Board relies on evaluations by ECEI and CPEES in assessing the quality of a candidate's engineering education from a foreign institution. A candidate who is a third- or fourth-year student in an ABET-approved engineering program in the United States may, with the Board's permission, be admitted to the FE examination, but will not be issued EIT certification without proof of graduation.

The proposed rulemaking would replace the contents of current § 37.31(1)(ii) with a provision that would permit a candidate to qualify for the FE examination through graduation from a graduate-level engineering curriculum from a college or university in the United States that has an ABET-approved undergraduate curriculum in the same engineering discipline, provided the candidate has completed basic engineering courses. This provision, which codifies the Board's longstanding interpretation of section 4.2 of the act, reflects the fact that a candidate with graduate degree in engineering but without an undergraduate degree from an ABET-approved program may nevertheless have satisfactory academic preparation to be admitted to the FE examination. Although ABET does not accredit graduate-level engineering programs, a graduate-level engineering program at a college or university that has an ABET-accredited undergraduate program in the same engineering discipline is likely to be of similar quality. Requiring a candidate with a graduate degree in engineering to demonstrate completion of basic engineering courses provides an additional level of assurance about the candidate's academic preparation. It also allows the Board to consider a candidate whose undergraduate degree is not in an engineering discipline. The proposed rulemaking would revise and relocate the contents of

current § 37.31(1)(ii) to a new § 37.31(1)(iii), which would permit a candidate to qualify for the FE examination based upon the requirements of section 4.2(b)(1)(ii) of the act (63 P.S. § 151.2(b)(1)(ii)) by having 8 years of progressive experience in engineering work and knowledge, skill, and education approximating that attained through graduation from an approved engineering curriculum. The experience must be of a quality and character that reflects a candidate's mastery of relevant mathematical and scientific principles. One or more years of academic training in engineering subjects may be applied towards the experience requirement.

Current § 37.31(2), subtitled "Professional engineer," provides that a candidate for licensure as a professional engineer must possess EIT certification and have qualifying work experience or teaching experience, obtained after EIT certification, for admission to the principles and practices of engineering examination (license examination). Subparagraph (i), subtitled "Work experience," provides that qualifying work experience consists of 4 or more years of progressive experience in engineering work under the supervision of professional engineer, or similarly qualified engineer, that is of a grade and character that permits the candidate to assume responsible charge of the work involved in the practice of engineering. "Similarly qualified engineer" is currently defined in § 37.1 as a non-licensee who, by means of education and experience, has attained a level of expertise in a recognized branch of engineering that the Board considers sufficient for purposes of supervising a licensure candidate's progressive work experience. Experience deemed unacceptable includes sales, construction and non-design work that does not involve the use of engineering knowledge and principles; the mere selection of data or equipment from a company catalog or similar publication; the mere execution of work as a superintendent; and the operation and maintenance of machinery and equipment. Work segments of less than 6 months' duration must be supported by adequate references. Subparagraph (ii), subtitled "Teaching experience," provides that qualifying teaching experience consists of 4 or more years of progressive teaching experience under the supervision of a professional engineer, or similarly qualified engineer, that is of a grade and character that permits the candidate to assume responsible charge of the work involved in the practice of engineering. "Progressive teaching experience" is currently defined in § 37.1 as a full-time faculty position that includes teaching third-year, fourth-year, or graduate-level engineering courses, covering the breadth and depth of the curriculum.

The proposed rulemaking would revise § 37.31(2) to provide that a candidate for licensure as a professional engineer be a person of good moral character, be certified as an EIT, and pass the license examination in one of the branches of engineering. The proposed rulemaking would further provide that a candidate may not be admitted to the license examination without having acquired the experience qualifications in subparagraph (i) or subparagraph (ii) between the time of issuance of EIT certification and the submission of an examination application, as is required by section 4.2(c)(1) of the act (63 P.S. § 151.2(c)(1)). The proposed rulemaking would revise § 37.31(2)(i) to provide that a candidate may qualify for the license examination by meeting the section 4.2(c)(1) requirement of 4 years of progressive experience in a major branch of engineering under the supervision of a professional engineer licensed in the United States or an engineer who, through education and experience, possesses the equivalent level of expertise as that of a professional engineer licensed in the United States. The experience must be of a grade and character to enable the candidate to assume responsible charge of the work involved in the practice of engineering. The revised § 37.31(2)(i) would

retain the categories of unacceptable work experience and would require a candidate to support all work experience, regardless of duration, with appropriate references.

The proposed rulemaking would revise § 37.31(2)(ii) to provide that a candidate may qualify for the license examination by having 4 years of progressive, full-time teaching experience in an ABET-approved engineering curriculum under the supervision of a professional engineer or an engineer who, through education and experience, has the equivalent level of expertise as that of a professional engineer. The teaching experience must include courses at the third-year, fourth-year, or graduate level, covering the breadth and depth of the curriculum, and be of a grade and character to prepare the candidate to assume responsible charge of engineering work. The requirement that the teaching experience be obtained in an ABET-approved engineering program provides an additional level of quality assurance since ABET accreditation includes an evaluation of faculty qualifications.

The proposed rulemaking would add a new paragraph (3), which would provide that a graduate degree may be substituted for each year of experience required under §§ 37.31(2)(i) and (ii), up to a maximum of 2 years, if the following conditions are met: the degree is from an academic institution that has an ABET-approved undergraduate curriculum; the degree is in the same discipline as the earned undergraduate degree; and the academic time is not concurrent with earned experience. This provision tracks section 4.2(d) of the act, which was added by the act of November 25, 2003 (P.L. 210, No. 35).

*§ 37.32 (relating to references)*

Section 37.32 requires a candidate for licensure as a professional engineer, as well as a candidate for EIT certification based on experience, to submit five references to support the candidate's experience qualifications, including three references who are professional engineers licensed in the United States and not related to the applicant. In the case of a candidate for licensure as a professional engineer, the professional engineer references must include those who directly supervised the candidate's experience. The Board will not review an application until all references have been received. If a reference reflects adversely on a candidate's experience or character, the Board may conduct an investigation into the matter and, based on the results of the investigation, require the candidate to submit additional references.

The proposed rulemaking would reorganize § 37.32 and retitle it as "references for certification as an engineer-in-training or licensure as a professional engineer." Proposed § 37.32(a) would clarify that references must be able to vouch for the candidate's good moral character as well as verify the candidate's experience. References who are not professional engineers must be professional land surveyors, professional geologists or unlicensed engineers who, through education and expertise, have an equivalent level of expertise as that of a professional engineer. References who are not professional engineers also must submit *curriculum vitae*. Requiring higher standards for references who are not professional engineers increases the likelihood that they can provide the Board with meaningful assessments of the candidate's fitness for professional practice. Proposed § 37.32(b) would restate the current language relating to the prerogative of the Board to conduct further investigation into a candidate's character and qualifications when a reference provides an adverse assessment and, if

necessary, to direct the candidate to submit additional references.

§ 37.33 (relating to grandfather provision)

Section 37.33 currently provides a cross reference to the “grandfather” provisions for certification as an EIT and licensure as a professional engineer under a prior version of the act. The proposed rulemaking would replace the cross-reference with the actual requirements in effect as of February 18, 1991, which until now, had been reproduced by the Board in booklet form and available on its website but which has not previously appeared in the Board’s regulations. New subsection (a) provide that these grandfather requirements apply to a candidate who received a qualifying academic degree before June 30, 1994, or who began acquiring qualifying experience before February 19, 1991.

Proposed subsection (b), subtitled “Engineer-in-training,” would provide that a candidate for certification as an EIT must be of good moral character and pass the FE examination, except that a candidate who received a qualifying academic degree before July 1, 1968, is not required to pass the FE examination. To be admitted to the FE examination, a candidate must possess one of the following qualifications: (1) graduation from an undergraduate engineering program in the United States approved by ABET or graduation from a foreign undergraduate engineering program recognized by ECEI or CPEES as substantially equivalent to ABET approval; (2) graduation from a graduate-level engineering curriculum in the United States that has an ABET-approved undergraduate program in the same discipline; or (3) four years of experience in engineering work, having acquired knowledge, skill and education approximating that attained through graduation from an approved engineering curriculum.

The grandfather requirements for EIT certification principally differ from current requirements in that the FE examination is waived for a candidate with a qualifying academic degree before July 1, 1968; a candidate who lacks a qualifying academic degree must show only 4 years of qualifying experience rather than 8 years; and a candidate may not take the FE examination while still a student.

Proposed subsection (c), subtitled “Professional engineer,” would provide that a candidate for licensure as a professional engineer must be of good moral character and pass the license examination. To be admitted to the license examination, a candidate must possess one of the following sets of qualifications: (i) EIT certification and 4 years of progressive engineering or teaching experience, in the case of a candidate who is a graduate of an approved engineering curriculum under subsection (b)(1) or (2), or (ii) successful completion of the FE examination and 8 years of progressive engineering experience (excluding the experience required to sit for the FE examination), in the case of a candidate who is not a graduate of an approved engineering curriculum under subsection (b)(1) or (2). The engineering and teaching experience must meet the standards applicable to regular candidates that are set forth in § 37.31(2). However, a candidate may not substitute a graduate-level engineering degree for any part of the requirements.

The grandfather provisions for licensure as a professional engineer principally differ from current requirements in that a candidate may obtain qualifying experience prior to EIT

certification; a candidate who lacks a qualifying academic degree must show 8 years of qualifying experience and education (excluding that required to sit for the FE examination); and a candidate may not use a graduate-level degree as a substitute for qualifying experience.

*§ 37.36 (relating to eligibility for licensure)*

Section 37.36 is a companion regulation to section 4.4 of the act (63 P.S. § 151.4), which took effect February 16, 1993, and sets forth the requirements for licensure as a professional geologist, as now amended by Act 25 also to provide for certification as a geologist-in-training (GIT). The proposed rulemaking would reorganize § 37.36 for clarity; retitle it as "Requirements for certification as a geologist-in-training and for licensure as a professional geologist;" incorporate requirements for certification as a geologist-in-training; and provide updated interpretive guidance of education and experience requirements.

The existing introductory paragraph of § 37.36 states that a candidate for licensure as a professional geologist must be a person of good moral character, meet education and experience requirements, and pass an examination adopted by the Board. The proposed rulemaking would replace that introductory paragraph and instead provide in subsection (a) that the requirements of this section apply to both candidates for certification as a geologist-in-training and for licensure as a professional geologist. Additionally, because section 4.4 of the act includes no requirement that geology experience be obtained after being certified as a geologist-in-training, the introductory paragraph would provide that a candidate who meets the requirements may apply to sit for the principles and practice of geology examination to become licensed as a professional geologist at the same time as applying to sit for the fundamentals of geology examination (FG examination) to become certified as a geologist-in-training. These two examinations comprise "the examination adopted by the board" as provided in section 4.4(b)(4) of the act and are the two standardized examination components developed by the National Association of State Boards of Geology (ASBOG), the National organization of state geologist licensing boards.

Current § 37.36(1), subtitled "Education," sets forth three permissible education qualifications: (i) graduation from an institution of higher learning with a major in geology, geophysics, geochemistry, or engineering geology, having completed 30 semester hours or 45 quarter hours in the major; (ii) graduation from an accredited institution of higher learning in the United States that does not offer a major in geology, geophysics, geochemistry or engineering geology, having completed 30 semester hours or 45 quarter hours in equivalent geological education, including 24 semester hours or its equivalent in third-year, fourth-year or graduate-level courses; or (iii) graduation from a foreign college or university with educational credentials that a Board-approved professional evaluation service deems the equivalent of bachelor's degree in geology, geophysics, geochemistry or engineering geology from an accredited institution of higher learning in the United States.

The proposed rulemaking would replace the contents of § 37.36(1) to provide in subsection (b) that a candidate for GIT certification must be a person of good moral character and pass the FG examination. Good moral character is a prerequisite for licensure as a professional geologist under section 4(b) of the act. Because GIT certification, when granted, is

a step in the licensure process, it follows that a GIT candidate must be a person of good moral character. The proposed rulemaking would further provide that a candidate may not be admitted to the FG examination without possessing one of the educational qualifications set forth in subparagraphs (b)(1)(i)-(iii). The proposed rulemaking would repeat in subparagraphs (b)(1)(i), (ii) and (iii) the current academic requirements for geologic education. It would revise subparagraphs (b)(1)(i) and (ii) to include the opportunity to sit for the FG examination upon completing 2 years of the approved program, subject to certification as a GIT upon proof of graduation, as authorized by newly-added section 4.4(c)(2) of the act. The proposed rulemaking also would identify in § 37.36(b)(1)(iii) the World Evaluation Service as one of the professional evaluation services approved by the Board for determining whether a candidate's degree from a foreign college or university is equivalent to a bachelor's degree in geology or related major from an accredited institution of higher learning in the United States. Proposed § 37.36(b)(2) would also provide that a candidate's formal education, whether obtained in the United States or abroad, must include field geology and structural geology coursework that is sufficient to demonstrate that the candidate has educational experience in tectonics and fractured bedrock geology as well as the field methods needed to measure, map and evaluate geologic data. Proficiency in field geology and structural geology is not only necessary to pass the license examination, but it is also essential for general practice as a professional geologist.

Current § 37.36(2), subtitled, "Experience," provides that a candidate for licensure must have at least 5 years of experience performing professional geological work, including 3 years under the supervision of a professional geologist (or other qualified unlicensed geologist if obtained before February 16, 1993) or 5 years in a responsible position. "Professional geological work" is currently defined in § 37.1 (relating to definitions) as the performance of geological work or service that requires the utilization, application and interpretation of fundamental and practical principles of geology. The term includes technical completeness reviews and inspections of unfinalized work product but not routine sampling, laboratory work and geological drafting. "Responsible position" is currently defined in § 37.1 as a job that requires the exercise of independent judgment, competence and accountability in the performance of professional geological work. A graduate degree in geology, geophysics, geochemistry or engineering geology may be substituted for each year of experience up to a maximum of 2 years.

The proposed rulemaking would provide in subsection (c) that a candidate for licensure as a professional geologist shall be a person of good moral character, be certified as a GIT, and pass the principles and practice of geology examination. The proposed rulemaking would further provide that a candidate may not be admitted to the license examination without having acquired the experience qualifications in subparagraphs (c)(1)(i), (ii) or (iii) prior to submission of an examination application. Those experience qualifications are: (i) 5 years of experience performing geological services or work in a position that requires independent judgment, competence and accountability; (ii) 5 years of experience performing geological services or work, including 3 years under the supervision of a professional geologist, except that experience acquired before February 16, 1993, may be under the supervision of a geologist who, through education and experience, possesses the equivalent level of expertise as that of a professional geologist; or (iii) 5 years of progressive full-time teaching experience in a geologic curriculum, including senior-level and graduate-level coursework, at an accredited institution of higher learning. The requirements of subparagraph (c)(1)(i) are taken directly from section 4.4(c)(3) of



the act, considering a responsible position in professional geological work to be one that requires independent judgment, competence and accountability. The requirements of subparagraph (c)(1)(ii) are taken directly from section 4.4(c)(3) of the act. The Board considers progressive full-time teaching experience in a geological curriculum to be the equivalent of performing professional geological services in a position that requires independent judgment, competence and accountability. The proposed rulemaking also would provide that qualifying experience must reflect the utilization, application and interpretation of fundamental and practical principles of geological sciences, and that it also must be of a grade and character to permit the candidate to assume responsible charge of the work involved in the practice of geology. The proposed rulemaking would further specify that acceptable experience may include technical completeness reviews or inspections of unfinalized work product, but that it may not include routine sampling, laboratory work and geological drafting. The revised § 37.36(c)(2) also would retain the language relating to the permissible substitution of a relevant graduate degree for a year of required experience, as is suggested by section 4.4(c)(3) of the act.

§ 37.37 (*relating to references*)

Section 37.37 sets forth requirements relating to references for a candidate for licensure as a professional geologist. Subsection (a) provides that a candidate whose experience qualifications include 3 years of experience performing professional geological work under the supervision of a professional geologist or other qualified geologist must submit three references who can attest to the candidate's moral character and verify the candidate's experience. The references should include the professional geologists or other qualified geologists who supervised the candidate's experience. The Board will not review an application until all references have been received. Subsection (b) provides that a candidate whose experience qualifications include 5 years of experience in a responsible position performing professional geological work must submit three references who can attest to the candidate's good moral character and verify the candidate's experience. Subsection (c) provides that if a reference reflects adversely on a candidate's character or experience, the Board may conduct an investigation into the matter and, based on the results of the investigation, require the candidate to submit additional references.

The proposed rulemaking would retitle § 37.37 as "References for licensure as a professional geologist," and reorganize it by deleting subsection (b) and redesignating subsection (c), with editorial changes, as the new subsection (b). Subsection (a) would be revised to provide that a candidate shall submit as references at least three professional geologists who can attest to the candidate's good moral character and who either supervised the candidate or can otherwise verify the candidate's experience. A candidate may submit additional experience references who are professional engineers, professional land surveyors, or unlicensed geologists who, through education and experience, have an equivalent level of expertise to that of a professional geologist. References who are not professional geologists must submit *curriculum vita*. The higher standards for references should improve the assessments made of a candidate's fitness for professional practice.

*§ 37.47 (relating to eligibility for certification or licensure, or both)*

Section 37.47 is a companion regulation to section 4.3 of the act (63 P.S. § 151.3), which sets forth the requirements for certification as a surveyor-in-training (SIT) and licensure as a professional land surveyor. The proposed rulemaking would reorganize § 37.47; retitle it as “Requirements for certification as a surveyor-in-training and for licensure as a professional land surveyor”; and provide updated interpretative guidance about the educational and experience requirements for non-grandfather candidates for SIT certification and professional land surveyor licensure. Section 4.3 was added to the act by Act 192. Act 192 provided that the requirements of section 4.3 (mistakenly referred as section 4.1) applied to candidates who received qualifying academic degrees on or after June 30, 1994, or who began obtaining qualifying experience on or after February 19, 1991. All other candidates would be evaluated according to the requirements in existence as of February 18, 1991.

The introductory paragraph of current § 37.47 provides that a candidate for licensure as a professional land surveyor must pass the fundamentals of surveying examination (FS examination) and become certified as an SIT, and that a candidate who is certified as an SIT retains such status without time limitation until the candidate becomes licensed as a professional land surveyor. The proposed rulemaking would add a new introductory paragraph providing that the requirements in § 37.47 apply to a candidate who obtained a qualifying academic degree or who began obtaining qualifying experience on or after the dates set forth above.

Current § 37.47(1), subtitled “Surveyor-in-training,” provides that a candidate for certification as an SIT must meet qualifying education or experience requirements. Subparagraphs (i) and (ii) provide that qualifying education of an SIT candidate is graduation from an approved engineering curriculum, including a minimum of 10 credit hours of instruction in surveying, or graduation from an associate’s degree program in an approved surveying technology curriculum, respectively. Subparagraph (iii) provides that qualifying experience for an SIT candidate is 6 or more years of progressive experience in surveying work and knowledge, skill and education approximating that attained through graduation from an approved land surveying or civil engineering curriculum. “Progressive experience in surveying work” in the context of SIT certification is defined in § 37.1 (relating to definitions) as experience of a grade and character that enables the candidate to independently learn the surveying skills and principles of mathematics attained through an associate’s degree program in surveying. Qualifying experience must show diversification between field and office work, with no less than 25% of the experience in either area.

The proposed rulemaking would revise § 37.47(1) to provide that a candidate for SIT certification shall be a person of good moral character and pass the FS examination. As with licensure as a professional engineer, good moral character is a prerequisite for licensure as a professional land surveyor under section 4(b) of the act (63 P.S. § 151(b)). Inasmuch as SIT certification is a condition precedent to licensure, it follows that a candidate for SIT certification be a person of good moral character. The proposed rulemaking would further provide that a candidate may not be admitted to the FS examination without possessing one of the qualifications set forth in subparagraphs (i)-(iv). The proposed rulemaking would revise § 37.47(1)(i) to provide that a candidate may qualify for the FS examination through graduation

from an ABET-approved undergraduate civil engineering program in the United States that includes a minimum of 10 credit hours of instruction in surveying or through graduation from an ABET-approved undergraduate 4-year surveying curriculum in the United States. A third- or fourth-year student in an approved surveying program would be permitted to take the FS examination, but the student would not be eligible for SIT certification until after graduation. The proposed rulemaking would revise § 37.47(1)(ii) to provide that a candidate may qualify for the FS examination through graduation from an ABET-approved program in the United States that confers an associate's degree in surveying. ABET accredits 2-year and 4-year surveying programs offered by institutions of higher learning in the United States. Although section 4.3 of the act does not specifically recognize graduation from a 4-year surveying program as qualifying education for SIT certification, such recognition is implicit in the provision, added by the act of November 25, 2002 (P.L. 1113, No. 136), that authorizes surveying students who have completed at least 2 or more years of an approved curriculum to take the FS examination. The proposed rulemaking would revise § 37.47(1)(iii) to provide that the 6 years of qualifying experience for the FS examination must not only be equivalent to that attained through graduation from an approved land surveying or civil engineering program, but must also be of a grade and character that reflects the candidate's mastery of relevant surveying skills and principles of mathematics. The required diversification of experience between field and office work would be retained.

Current § 37.47(2), subtitled "Professional land surveyor," provides that a candidate for licensure as a professional land surveyor must possess SIT certification and have qualifying work experience or teaching experience, obtained after SIT certification, for admission to the principles and practices of surveying examination (license examination). Subparagraph (i), titled "Work experience," provides that the qualifying work experience consists of 4 or more years of progressive experience in land surveying under the supervision of a professional land surveyor, or similarly qualified surveyor, that is of a grade and character that permits the candidate to assume responsible charge of the work involved in the practice of land surveying. "Similarly qualified surveyor" is currently defined in § 37.1 as a non-licensure candidate who has attained a level of expertise in land surveying by means of education and experience that the Board considers sufficient for purposes of supervising a licensure candidate's progressive work experience. Work segments of less than 6 months' duration must be supported by adequate references. Subparagraph (ii), subtitled "Teaching experience," provides that qualifying teaching experience consists of 4 or more years of progressive teaching experience in an approved curriculum under the supervision of a professional land surveyor, or similarly qualified surveyor, that is of a grade and character that permits the candidate to assume responsible charge of the work involved in the practice of land surveying.

The proposed rulemaking would revise § 37.47(2) to provide that a candidate for licensure as a professional land surveyor shall be a person of good moral character, be certified as an SIT and pass the license examination. The proposed rulemaking would further provide that a candidate may not be admitted to the license examination without having acquired the experience qualifications in subparagraph (i) or subparagraph (ii) between the time of SIT certification and submission of an examination application, as is required by section 4.3(c)(1) of the act. Revised §§ 37.47(2)(i) and 37.47(2)(ii) would provide that a candidate may qualify for the license examination by having obtained 4 years of progressive work experience or 4 years of

progressive full-time teaching experience in an approved surveying curriculum, respectively. The experience must be obtained under the supervision of a professional land surveyor or a land surveyor who, through education and experience, possesses the equivalent level of expertise as that of a professional land surveyor, as is required by section 4.3(c)(1) of the act. The experience also must be of a grade and character to enable the candidate to assume responsible charge of the work involved in the practice of land surveying. The teaching experience must include courses at the third-year, fourth-year, or graduate-level and cover the breadth and depth of the curriculum.

*§ 37.48 (relating to references)*

Section 37.48 requires a candidate for licensure as a professional land surveyor, as well as a candidate for SIT certification based on experience, to submit five references, including three professional land surveyors, who are qualified to evaluate the candidate's experience and who are not related to the candidate. The references must include professional land surveyors or professional engineers who directly supervised the candidate's work. The Board will not review an application until all references have been received. If a reference reflects adversely on the candidate's character or experience, the Board may conduct an investigation into the matter and, based on the results of the investigation, require the candidate to submit additional references.

The proposed rulemaking would reorganize § 37.48 and retitle it as "References for certification as a surveyor-in-training or licensure as a professional land surveyor." Proposed § 37.48(a) would clarify that references must be able to vouch for the candidate's good moral character as well as verify the candidate's experience. The references who are not professional land surveyors must be professional engineers, professional geologists, or unlicensed surveyors who, through education and experience, have an equivalent level of expertise as that of a professional land surveyor. References who are unlicensed surveyors are required to submit *curriculum vitae*. As with the engineering and geology professions, requiring higher standards for references will result in more meaningful assessments of a candidate's fitness for practice as a professional land supervisor. Proposed § 37.32(b) would restate the current language relating of the prerogative of the Board to conduct a further investigation into a candidate's character and experience when a reference provides an adverse assessment and, if necessary, to direct the candidate to submit additional references.

*§ 37.49 (relating to grandfather provision)*

Section 37.49 currently provides a cross reference to the grandfather requirements for licensure as a professional land surveyor under Act 192. The proposed rulemaking would delete the cross reference and instead set forth the grandfather requirements for professional land surveyor license candidates based on the version of the act in effect as of February 18, 1991. These requirements apply to a candidate who received a qualifying academic degree before June 30, 1994, or who began acquiring qualifying experience before February 19, 1991.

Proposed § 37.49(b) would provide that a candidate for licensure as a professional land surveyor must be of good moral character and pass the FS and license examinations. To be admitted to the examinations, a candidate must possess one of the following qualifications: (1)

graduation from an ABET-approved undergraduate civil engineering curriculum in the United States, including a minimum of 10 credit hours of instruction in surveying, and four years of progressive experience in land surveying work; (2) graduation from an ABET-approved associate's degree curriculum in surveying and 4 years of progressive experience in land surveying work; and (3) 10 years of progressive experience in land surveying work, including 5 years in responsible charge of primary land surveying functions. Subsection (c) would set forth the experience requirements. The experience must have been obtained under the supervision of a professional land surveyor or a land surveyor who, through education and experience, possesses the equivalent level of expertise as that of a professional land surveyor. The experience must be of a grade and character to enable the candidate to assume responsible charge of the work involved in the practice of land surveying. The experience must also reflect a diversification of field and office work, with no less than 25% of the experience in either area.

The grandfather requirements for licensure principally differ from the current requirements in that a candidate may take the FS and license examinations at the same time; there is no provision for being certified as a SIT; there is no education option that permits a surveying student to take the FS examination in advance of graduation; and there is no experience option relating to teaching experience in an approved surveying curriculum.

#### Fiscal Impact and Paperwork Requirements

The proposed rulemaking would require the Board to make minor changes to its application forms. The rulemaking would not have a fiscal impact on, or create additional paperwork for, the regulated community, the general public, or the Commonwealth and its political subdivisions.

#### Sunset Date

The Board continuously monitors the effectiveness of its regulations. Therefore, no sunset date has been assigned.

#### Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on December 15, 2011, the Board submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate Consumer Protection and Professional Licensure Committee and the House Professional Licensure Committee. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Board, the General Assembly and the Governor of comments, recommendations or objections raised.

Public Comment

Interested persons are invited to submit written comments, recommendations or objections regarding this proposed rulemaking to Regulatory Unit counsel, Department of State, at P. O. Box 2649, Harrisburg, PA 17105-2649 or by e-mail at ST-ENGINEER@state.pa.us, within 30 days of publication of this proposed rulemaking in the *Pennsylvania Bulletin*. Please reference No. 16A-4711 (qualifications for licensure), when submitting comments.

Thomas Gillespie, PG  
President  
State Registration Board for Professional Engineers,  
Land Surveyors and Geologists

**ANNEX A**

**TITLE 49. PROFESSIONAL AND VOCATIONAL STANDARDS**

**PART I. DEPARTMENT OF STATE**

**Subpart A. PROFESSIONAL AND OCCUPATIONAL AFFAIRS**

**CHAPTER 37. STATE REGISTRATION BOARD FOR PROFESSIONAL**

**ENGINEERS, LAND SURVEYORS AND GEOLOGISTS**

**GENERAL PROVISIONS**

**§ 37.1. Definitions.**

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

ABET – A Nationally recognized accrediting body that accredits undergraduate engineering programs offered by colleges and universities in the United States. ABET was formerly known as the Accreditation Board for Engineering and Technology, Inc.

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ASBOG – The National Association of State Boards of Geology.

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[*Engineering curriculum* – A curriculum of 4 or more years approved by a National accrediting association recognized by the Board which leads to a baccalaureate degree. In the case of a degree issued from an institution outside of the United States, an engineering curriculum is a curriculum of 4 or more years which a Board recognized professional credentials evaluation service has determined to be equivalent to a baccalaureate degree issued from a college or university in the United States.]

\* \* \* \* \*

NCEES – The National Council of Examiners for Engineering and Surveying.

[*Professional geological work* – The performance of geological service or work, including technical completeness reviews or inspections of unfinalized work product, that requires the utilization, application and interpretation of fundamental and practical principles of the geological sciences in the practice of geology. The term does not include routine sampling, laboratory work or geological drafting.

*Progressive experience in engineering work* – Within the context of the engineering-in-training, experience of a grade and character sufficient to enable an individual to learn through practice the principles of math and science attained through formal education.

*Progressive experience in surveying work* – Within the context of a surveyor-in-training, experience of a grade and character sufficient to qualify an individual to personally and independently attain the equivalent surveying skills and math attained through an associate degree program in surveying.

*Progressive teaching experience* – Full-time faculty teaching experience, attained after the issuance of an engineer-in-training certificate or a surveyor-in-training certificate which includes teaching engineering courses or land surveying courses at the junior, senior or graduate level, covering the breadth and depth of the curriculum.

*Responsible position* – A job which requires independent judgment, competence and accountability in the performance of professional geological work.

*Similarly qualified engineer* – A natural person who is not registered as a professional engineer in this Commonwealth, or in another jurisdiction which licenses professional engineers, who has attained a level of expertise in a recognized branch of engineering by means of experience and education which, in the opinion of the Board, would qualify the person to provide supervision of



the applicant's progressive work experience in the major branch of engineering in which the applicant indicates proficiency.

*Similarly qualified surveyor* – A natural person who is not registered as a professional land surveyor in this Commonwealth, or in another jurisdiction which licenses professional land surveyors, who has attained a level of expertise in land surveying by means of experience and education which, in the opinion of the Board, would qualify the person to provide supervision of the applicant's progressive work experience in land surveying.]

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### REGISTERED PROFESSIONAL ENGINEERS

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**§ 37.31. [Eligibility for certification or licensure, or both.] Requirements for certification as an engineer-in-training and for licensure as a professional engineer.**

[Before an applicant takes the examination for licensure as a professional engineer, the applicant shall satisfactorily complete the engineering fundamentals examination and become certified as an engineer-in-training. An applicant who is certified as an engineer-in-training shall remain certified without time limitation until the applicant becomes licensed as a professional engineer.] The following requirements apply to a candidate who received a qualifying academic degree on or after June 30, 1994, or who began acquiring qualifying experience on or after February 19, 1991.

- (1) *Engineer-in-training.* [An applicant] A candidate for certification as an engineer-in-training [shall show satisfactory evidence to the Board of having met one of the following education or experience requirements] shall be of good moral character and satisfactorily complete the NCEES fundamentals of engineering examination. To qualify for the

fundamentals of engineering examination, the candidate shall possess one of the following qualifications:

- (i) [*Education.* Graduation from an approved engineering curriculum of 4 or more years, except that an engineering student who has completed 2 or more years of an approved program in engineering may take the engineering fundamentals examination. The student is not eligible for certification as an engineer-in-training until proof of graduation is provided to the Board.] Graduation from an undergraduate engineering curriculum in the United States approved by ABET or graduation from a foreign undergraduate engineering curriculum recognized as substantially equivalent to ABET approval by ABET's Engineering Credentials Evaluation International (ECEI) or by NCEES's Center for Professional Engineering Education Services (CPEES). A student who has completed 2 years in an ABET-approved undergraduate curriculum in the United States and has maintained current enrollment may, with Board approval, sit for the fundamentals of engineering examination, but will not be eligible for certification as an engineer-in-training until the student provides proof of graduation.
- (ii) Graduation from a graduate-level engineering curriculum at a college or university in the United States that has an ABET-approved undergraduate curriculum in the same discipline, provided the candidate has completed basic engineering courses.
- (iii) [*Experience.*] Eight [or more] years of progressive experience in engineering work and knowledge, skill and education approximating that attained through graduation from an approved engineering curriculum. The experience must be of a

grade and character sufficient to enable the candidate to independently learn through practice the principles of mathematics and science attained through formal education.  
Academic training in engineering subjects may be counted towards the experience requirement.

(2) *Professional engineer.* [An applicant] A candidate for licensure as a professional engineer shall be of good moral character, be certified as an engineer-in-training [and show satisfactory evidence to the Board of having met one of the following experience requirements], and satisfactorily complete the NCEES principles and practice of engineering examination in one of the branches of engineering. To qualify for the principles and practice examination, the engineer-in-training shall have obtained one of the following experience qualifications between the issuance of the engineer-in-training certificate and the submission of the examination application:

(i) [*Work experience.* Four or more years of progressive experience in engineering work performed after the issuance of the engineer-in-training certificate. The experience shall be obtained by working under the supervision of a professional engineer or a similarly qualified engineer, and shall be of a grade and character to qualify the applicant to assume responsible charge of the work involved in the practice of engineering. Experience of short periods of duration; that is, 6 months or less, which is used to comprise the minimum requirements shall be supported by adequate references. The experience shall be in the major branch of engineering in which the applicant indicates proficiency. For sales, construction and similar nondesign experience to be acceptable, an applicant shall demonstrate conclusively to the Board that engineering principles and engineering knowledge were actually

employed. The mere selection of data or equipment from a company catalog or a similar publication is not acceptable work experience. The mere execution as a contractor of work designed by a professional engineer, or the supervision of the construction of the work as a superintendent, or the operation or maintenance of machinery or equipment is not acceptable work experience.] Four years of progressive experience in a major branch of engineering, acquired under the supervision of a professional engineer licensed in the United States or an engineer who, through education and experience, possesses the equivalent level of expertise as that of a professional engineer licensed in the United States. The experience must be of a grade and character to qualify the candidate to assume responsible charge of the work involved in the practice of the major branch of engineering in which the candidate indicates proficiency. For sales, construction and similar nondesign experience to be acceptable, the candidate shall demonstrate that engineering principles and engineering knowledge were actually employed. Unacceptable experience includes the selection of data or equipment from a company catalog or similar publication, the execution as a contractor of work designed by a professional engineer, the supervision of construction work as a superintendent, and the operation or maintenance of machinery or equipment. The candidate shall support all work experience, regardless of duration, with adequate references.

(ii) *[Teaching experience.]* Four [or more] years of progressive full-time teaching experience in an ABET-approved engineering curriculum under the supervision of a professional engineer or [similarly qualified] an engineer who, through education and experience, possesses the equivalent level of expertise as a professional engineer.

The [teaching] experience [shall] must include the teaching of engineering courses at the third-year, fourth-year or graduate level, covering the breadth and depth of the curriculum, and must be of a grade [or] and character to qualify the [applicant] candidate to assume responsible charge of the work involved in the practice of engineering.

(3) A post-baccalaureate engineering degree may be substituted for each year of experience required under paragraph (2), up to a maximum of 2 years, if all of the following conditions are met:

(i) The degree is from an academic institution that has an ABET-approved undergraduate curriculum.

(ii) The degree is in the same discipline as an earned undergraduate degree.

(iii) The academic time is not concurrent with earned experience.

**§ 37.32. References for certification as an engineer-in-training or licensure as a professional engineer.**

(a) [As part of the application process, an applicant applying under § 37.31(1)(ii) and (2) (relating to eligibility for certification or licensure, or both), shall give the names and addresses of five references, three of whom are licensed professional engineers in this Commonwealth or another state or territory of the United States. Professional engineers used as references shall be qualified to evaluate the applicant's training and experience, and know the applicant personally, but may not be related to the applicant. Individuals named as references should include professional engineers under whose direct supervision the applicant has worked. The Board will not review an application until five acceptable references have been received. If, in the opinion of the Board, references reflect adversely on the applicant's character or qualifications, the Board may withhold processing the

application until an investigation into the applicant's character or qualifications, or both, is completed. Based upon the results of an investigation, additional references may be required by the Board.] A candidate for licensure as a professional engineer, and a candidate for certification as an engineer-in-training who seeks to qualify for the examination based on experience, shall provide as references the names and addresses of at least five persons who can attest to the applicant's good moral character and who either directly supervised the candidate or can otherwise verify the candidate's experience. At least three of the references shall be professional engineers licensed in the United States who are unrelated to the candidate. The remaining references may be professional land surveyors, professional geologists, or unlicensed engineers who, through education and experience, possess an equivalent level of expertise as that of a professional engineer. A reference who is not a professional engineer licensed in the United States is required to submit a *curriculum vitae*.

(b) If, in the opinion of the Board, the references adversely reflect on the candidate's character or qualifications, the Board may withhold processing the candidate's application until an investigation into the candidate's character or qualifications, or both, is completed. The candidate will be notified in writing of any investigation that is being conducted. Based on the results of the investigation, the Board may require the candidate to submit additional references.

**§ 37.33. Grandfather [provision] requirements for certification as an engineer-in-training and for licensure as a professional engineer.**

[Under section 14 of the act (63 P.S. § 151.1, note), an applicant who has completed the educational requirements for licensure as a professional engineer by June 30, 1994, or who has commenced the experience requirements for licensure as a professional engineer prior to February 19, 1991, shall comply with the education and experience requirements of the act of May 23, 1945

(P.L. 913, No. 367) as they existed on February 15, 1991, the day prior to the effective date of Act 192 of 1990.]

(a) Scope. The requirements in this section apply to a candidate who received a qualifying academic degree before June 30, 1994, or who began acquiring qualifying experience before February 19, 1991.

(b) Engineer-in-training. A candidate for certification as an engineer-in-training under this subsection shall be of good moral character and satisfactorily complete the NCEES fundamentals of engineering examination, except that completion of the fundamentals of engineering examination is not required of a candidate who received a qualifying academic degree before January 1, 1968. To qualify for the fundamentals of engineering examination, the candidate shall possess one of the following qualifications:

(1) Graduation from an undergraduate engineering curriculum in the United States approved by ABET or graduation from a foreign undergraduate engineering curriculum recognized by ABET's Engineering Credentials Evaluation International (ECEI) or by NCEES's Center for Professional Engineering Education Services (CPEES) as substantially equivalent to ABET approval.

(2) Graduation from a graduate-level engineering curriculum in the United States that has an ABET-approved undergraduate curriculum in the same discipline.

(3) Four years of experience in engineering work, having acquired knowledge, skill and education approximating that attained through graduation from an approved engineering curriculum.

(c) Professional engineer. A candidate for licensure as a professional engineer under this subsection shall be of good moral character and satisfactorily complete the NCEES principles and

practice examination in one of the branches of engineering.

(1) To qualify for the principles and practice examination, the candidate shall possess one of the following sets of qualifications prior to submission of the examination application:

(i) Possession of an engineer-in-training certificate and 4 years of progressive engineering or teaching experience, in the case of a candidate who is a graduate from an approved engineering curriculum under subsection (b)(1) or (2).

(ii) Successful completion of the fundamentals of engineering examination and 8 years of progressive engineering experience (excluding the experience required to sit for the fundamentals of engineering examination), in the case of candidate who is not a graduate of an approved engineering curriculum under subsection (b)(1) or (2).

(2) The engineering and teaching experience required under this subsection must comply with the standards set forth in § 37.31(2) (relating to requirements for certification as an engineer-in-training or licensure as a professional engineer). However, a candidate may not substitute a post-baccalaureate engineering degree for any part of the required experience.

\* \* \* \* \*

## REGISTERED PROFESSIONAL GEOLOGISTS

**§ 37.36. [Eligibility for licensure] Requirements for certification as a geologist-in-training and for licensure as a professional geologist.**

[An applicant for licensure as a professional geologist shall be of good moral character, meet the following education and experience requirements and pass an examination adopted by the Board.]

(a) *General.* The requirements in this section apply to candidates for certification as a geologist-in-training and candidates for licensure as a professional geologist. A candidate who meets the



applicable requirements may apply at the same time both to sit for the fundamentals of geology examination in order to be certified as a geologist-in-training and to sit for the principles and practice of geology examination in order to be licensed as a professional geologist.

[(1) *Education.*

(i) An applicant shall submit evidence to the Board of having graduated from an accredited institution of higher learning with a major in geology, geophysics, geochemistry or engineering geology, with a minimum of 30 semester or 45 quarter hours in geology, geophysics, geochemistry, engineering geology or their subdivisions.

(ii) An applicant who has graduated from an accredited institution of higher learning which does not grant semester or quarter hours in geological science courses leading to a major in geology, shall submit evidence to the Board of having completed 30 semester or 45 quarter hours or an equivalent amount of an equivalent amount of geological education, of which at least 24 semester hours or an equivalent amount are in third or fourth year undergraduate courses or graduate courses. The applicant shall submit documentation from the institution certifying that at the time the applicant attended the institution, the institution did not offer semester or quarter hours in geological science courses leading to a major in geology. The certification shall accompany the application materials.

(iii) Graduates of a foreign college or university shall have their educational credentials reviewed by a professional evaluation service approved by the Board. To be acceptable, the applicant's educational credentials shall be equivalent to a Bachelor Degree in geology, geophysics, geochemistry, engineering geology or their

subdivisions from an accredited United States college or university.]

(b) *Geologist-in-training.* A candidate for certification as a geologist-in-training shall be of good moral character and satisfactorily complete the ASBOG fundamentals of geology examination.

(1) To qualify for the fundamentals of geology examination, the candidate shall possess one of the following qualifications:

(i) Graduation from an accredited institution of higher learning in the United States, having majored in geology, geophysics, geochemistry or engineering geology and having completed 30 semester hours or 45 quarter hours in the major. A student who has completed 2 years in such a program and has maintained current enrollment may, with Board approval, sit for the fundamentals of geology examination, but will not be eligible for certification as an geologist-in-training until the student provides proof of graduation.

(ii) Graduation from an accredited institution of higher learning in the United States that does not offer a major in geology, geophysics, geochemistry or engineering geology, having completed 30 semester hours or 45 quarter hours or an equivalent amount of geological education, including 24 semester hours or an equivalent amount in third- or fourth-year courses or graduate courses. A student who has completed 2 years in such a program and has maintained current enrollment may, with Board approval, sit for the fundamentals of geology examination, but will not be eligible for certification as an geologist-in-training until the student provides proof of graduation.

(iii) Graduation from a foreign college or university that World Evaluation Services or other Board-approved professional evaluation service deems equivalent

to a bachelor's degree in geology, geophysics, geochemistry, or engineering geology from an accredited institution of higher learning in the United States.

(2) The formal education required under this subsection must include field geology and structural geology coursework that is sufficient to demonstrate that the candidate has educational experience in tectonics and fractured bedrock geology and the field methods needed to measure, map and evaluate geologic data.

[(2) *Experience.* An applicant shall complete at least 5 years of professional geological work.

The applicant's experience shall include either a minimum of 3 years of professional geological work under the supervision of a licensed professional geologist or a minimum of 5 years in a responsible position in professional geological work. Professional geological work performed prior to February 16, 1993, shall satisfy the requirement of this subsection if it was performed under the supervision of either a licensed professional geologist or a qualified geologist who was not licensed. Experience, to be acceptable, shall demonstrate the applicant's ability to apply principles of geology, geophysics, geochemistry, engineering geology or their subdivisions to the actual practice of geology. Routine sampling, laboratory work and geological drafting is not professional geological work and will not be credited as acceptable experience. A Graduate Degree in geology, geophysics, geochemistry, engineering geology or their subdivisions may be substituted as part of the total experience requirements for licensure, at the rate of 1 year for a Master's Degree and 1 year for a Doctor's Degree. Credit for a Graduate Degree may not exceed a total of 2 years toward meeting the required number of years of professional geological work.]

(c) *Professional geologist.* A candidate for licensure as a professional geologist shall be of good moral character, be certified as a geologist-in-training, and satisfactorily complete the ASBOG

principles and practice of geology examination.

(1) To qualify for the principles and practice examination, the geologist-in-training shall have obtained one of the following experience qualifications prior to the submission of the examination application:

(i) Five years of experience performing geological services or work in a position that requires independent judgment, competence and accountability.

(ii) Five years of experience performing geological services or work, including 3 years under the supervision of a professional geologist, except that experience acquired prior to February 16, 1993, may be under the supervision of an unlicensed geologist who, through education and experience, possesses the equivalent level of expertise as that of a professional geologist.

(iii) Five years of progressive full-time teaching experience in a geological curriculum, including senior-level or graduate-level coursework, at an accredited institution of higher learning.

(2) The experience required under this subsection must require the utilization, application and interpretation of fundamental and practical principles of the geological science, and must be of a character and grade to qualify the candidate to assume responsible charge of the work involved in the practice of geology. Acceptable experience may include the technical completeness reviews or inspections of unfinalized work product. Unacceptable experience includes routine sampling, laboratory work, and geological drafting. A graduate degree in geology, geophysics, geochemistry or engineering geology may be substituted as part of the experience requirements in this paragraph, at a rate of 1 year for a masters degree and 1 year for a doctoral degree. Credit for graduate degrees may not exceed 2 years of experience.

**§ 37.37. References for licensure as a professional geologist.**

(a) [As part of the application process, an applicant whose experience under § 37.36(2) (relating to eligibility for licensure) includes a minimum of 3 years of professional geological work under the supervision of either a licensed professional geologist or, in the case of work performed prior to February 16, 1993, a qualified geologist who was not licensed, shall give the names and addresses of at least three references who, collectively, can verify the required experience claimed by the applicant and attest to the applicant's good moral character. Individuals used as references should include either licensed professional geologists under whose direction the applicant has worked or unlicensed geologists who are qualified to evaluate the applicant's training and experience. The Board will not review an application until three acceptable references have been received.] A candidate for licensure as a professional geologist shall provide as references the names and addresses of at least three professional geologists who can attest to the applicant's good moral character and who either supervised the candidate or can otherwise verify the candidate's experience. A candidate may provide as additional experience references the names and addresses of professional engineers, professional land surveyors, or unlicensed geologists who, through education and experience, possess an equivalent level of expertise as that of a professional geologist. A reference who is an unlicensed geologist is required to submit a *curriculum vitae*.

(b) [An applicant whose experience under § 37.36(2) includes a minimum of 5 years experience in a responsible position in professional geological work shall give the names and addresses of at least three references who, collectively, can verify the experience claimed by the applicant and attest to the applicant's good moral character. The Board will not review an application until three acceptable references have been received.]

(c) If, in the opinion of the Board, the references reflect adversely on the [applicant's]

candidate's character or qualifications, the Board may withhold processing the candidate's application until an investigation into the [applicant's] candidate's character or qualifications, or both, is completed. The [applicant] candidate will be notified in writing of any investigation [which] that is being conducted [relative to the content of the applicant's application]. Based upon the results of [an] the investigation, the Board may require the candidate to submit additional references [may be required by the Board].

## REGISTERED PROFESSIONAL LAND SURVEYORS

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### § 37.47. [Eligibility for certification or licensure, or both.] Requirements for certification as a surveyor-in-training and for licensure as a professional land surveyor.

[Before an applicant takes the examination for licensure as a professional land surveyor, the applicant shall satisfactorily complete the surveying fundamentals examination and become certified as a surveyor-in-training. An applicant who is certified as a surveyor-in-training shall remain certified without time limitation until the applicant becomes licensed as a professional land surveyor.] The following requirements apply to a candidate who received a qualifying academic degree on or after June 30, 1994, or who began obtaining qualifying experience on or after February 19, 1991.

(1) *Surveyor-in-training.* [An applicant] A candidate for certification as a surveyor-in-training [shall show satisfactory evidence to the Board of having met one of the following requirements] shall be of good moral character and satisfactorily complete the NCEES fundamentals of surveying examination. To qualify for the fundamentals of surveying examination, the candidate shall possess one of the following qualifications:

(i) Graduation from an [approved] undergraduate civil engineering curriculum in

the United States approved by ABET [of at least 4 years], including a minimum of 10 credit hours of instruction in surveying or graduation from an undergraduate 4-year surveying curriculum in the United States approved by ABET. A student who has completed 2 years of a 4-year surveying curriculum and has maintained current enrollment may, with Board approval, sit for the fundamentals of surveying examination, but will not be eligible for certification as a surveyor-in-training until the student provides proof of graduation.

(ii) Graduation from an [associate] associate's degree program in surveying technology curriculum approved by ABET.

(iii) [Completion of 6 or more] Six years of progressive experience in surveying, and knowledge, skill and education equivalent to that attained through graduation from an approved land surveying or civil engineering curriculum. [For experience to be acceptable to the Board, an applicant shall show diversification of field and office experience, with a minimum of 25% of the experience in each area.] The experience must reflect diversification of field and office work, with no less than 25% of the experience in either area, and must be of a grade and character sufficient to enable the candidate to independently learn through practice the surveying skills and principles of mathematics attained through formal education.

(2) *Professional land surveyor.* [An applicant] A candidate for licensure as a professional land surveyor shall be of good moral character, be certified as a surveyor-in-training [and show satisfactory evidence to the Board of having met one of the following requirements], and satisfactorily complete the NCEES principles and practice of surveying examination. To qualify for the principles and practice examination, the surveyor in training

shall have obtained one of the following experience qualifications between the issuance of the surveyor-in-training certificate and the submission of the examination application:

- (i) [*Work experience.* Four or more years of progressive experience in land surveying work performed after the issuance of the surveyor-in-training certificate. The experience shall be obtained by working under the supervision of a professional land surveyor or similarly qualified surveyor and shall be of a grade and character to qualify the applicant to assume responsible charge of the work involved in the practice of land surveying. Experience of short periods of duration; that is, 6 months or less, which is used to comprise the minimum requirements shall be supported by adequate references.] Four years of progressive experience in surveying work acquired under the supervision of a professional land surveyor or a land surveyor who, through education and experience, possesses the equivalent level of expertise as that of a professional land surveyor. The experience shall be of a grade and character to qualify the candidate to assume responsible charge of the work involved in the practice of land surveying.
- (ii) [*Teaching experience.*] Four [or more] years of progressive full-time faculty teaching experience in [an approved] a surveying curriculum approved by ABET under the supervision of a professional land surveyor or a [similarly qualified] surveyor who, through education and experience, possesses the equivalent level of expertise as a professional land surveyor. The [teaching] experience [shall] must include the teaching of surveying courses at the third-year, fourth-year or graduate level, covering the breadth and depth of the curriculum, and must be of a grade or character to qualify the applicant to assume responsible charge of the work involved



in the practice of land surveying.

**§ 37.48. References for certification as a surveyor-in-training or licensure as a professional land surveyor.**

(a) [As part of the application process, an applicant applying under § 37.47(1)(iii) and (2) (relating to eligibility for certification or licensure, or both) shall give the names and addresses of five references, three of whom shall be licensed professional land surveyors in this Commonwealth or another state or territory of the United States. Individuals used as references shall be qualified to evaluate the applicant's training and experience and know the applicant personally, but may not be related to the applicant. Individuals used as references shall include professional land surveyors or professional engineers under whose direct supervision the applicant has worked. The Board will not review an application until five acceptable references have been received. If, in the opinion of the Board, references reflect adversely on the applicant's character or qualifications, the Board may withhold processing the application until an investigation into the applicant's character or qualifications, or both, is completed. Based upon the results of an investigation, additional references may be required by the Board.] A candidate for licensure as a professional land surveyor, and a candidate for certification as a surveyor-in-training who seeks to qualify for the certification examination based on experience, shall provide as references the names and addressees of at least five references, unrelated to the candidate, who can attest to the candidate's good moral character and who either directly supervised the candidate or can otherwise verify the candidate's experience. At least three of the references shall be professional land surveyors. The remaining references may be professional engineers, professional geologists, or unlicensed surveyors who, through education and experience, possess an equivalent level of expertise as that of a professional land surveyor. A reference who is an unlicensed surveyor is required to submit a *curriculum vitae*.

(b) If, in the opinion of the Board, the references reflect adversely on the candidate's character or qualifications, the Board may withhold processing the candidate's application until an investigation into the candidate's character or qualifications, or both, is completed. The candidate will be notified in writing of any investigation that is being conducted. Based on the results of the investigation, the Board may require additional references.

**§ 37.49. Grandfather [provision] requirements for licensure as a professional land surveyor.**

[Under section 14 of the act (63 P.S. § 151.1, note), applicants who have completed their educational requirements for licensure as a professional land surveyor by June 30, 1994, or who have commenced their experience requirements for licensure as a professional land surveyor prior to February 19, 1991, shall comply with the education and experience requirements of the act of May 23, 1945 (P.L. 913, No. 367), as they existed on February 15, 1991, the day prior to the effective date of Act 192 of 1990.]

(a) The requirements in this section apply to a candidate who received a qualifying academic degree before June 30, 1994, or who began obtaining qualifying experience before February 19, 1991.

(b) A candidate for licensure as a professional land surveyor under this section shall be of good moral character and satisfactorily complete the NCEES fundamentals of surveying examination and principles and practice of surveying examination. To qualify for the examinations, the candidate shall possess one of the following sets of qualifications prior to submission of the examination application:

- (1) Graduation from an undergraduate civil engineering curriculum in the United States approved by ABET, including a minimum of 10 credit hours of instruction in surveying, and 4 years of progressive experience in land surveying work.

(2) Graduation from an associate's degree program in a curriculum in surveying approved by ABET and 4 years of progressive experience in land surveying work.

(3) Ten years of progressive experience in land surveying work, including 5 years in responsible charge of primary land surveying functions.

(c) The experience required under this section must have been acquired under the supervision of a professional land surveyor or an unlicensed surveyor who, through education and experience, possesses the equivalent level of expertise as that of a professional land surveyor. The experience must be of a grade and character to qualify the candidate to assume responsible charge of the work involved in the practice of land surveying. The experience must reflect diversification of field and office work, with no less than 25% of the experience in either area.

\* \* \* \* \*



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF STATE  
BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS  
STATE REGISTRATION BOARD FOR PROFESSIONAL ENGINEERS,  
LAND SURVEYORS AND GEOLOGISTS

Post Office Box 2649  
Harrisburg, Pennsylvania 17105-2649  
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December 15, 2011

The Honorable Silvan B. Lutkewitte, III, Chairman  
INDEPENDENT REGULATORY REVIEW COMMISSION  
14<sup>th</sup> Floor, Harristown 2, 333 Market Street  
Harrisburg, Pennsylvania 17101

Re: Proposed Regulation  
State Registration Board for Professional Engineers, Land Surveyors and Geologists  
16A-4711: QUALIFICATIONS FOR LICENSURE

Dear Chairman Lutkewitte:

Enclosed is a copy of a proposed rulemaking package of the State Registration Board for Professional Engineers, Land Surveyors and Geologists pertaining to Qualifications for Licensure.

The Board will be pleased to provide whatever information the Commission may require during the course of its review of the rulemaking.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Gillespie".

Thomas Gillespie, PG, President  
State Registration Board for Professional Engineers,  
Land Surveyors and Geologists

TG/TAB:rs  
Enclosure

cc: Katie True, Commissioner  
Bureau of Professional and Occupational Affairs  
Rebecca Oyler, Director of Policy, Department of State

Steven V. Turner, Chief Counsel

Department of State

Cynthia Montgomery, Regulatory Counsel

Department of State

Thomas A. Blackburn, Counsel

State Registration Board for Professional Engineers, Land Surveyors and Geologists

State Registration Board for Professional Engineers, Land Surveyors and Geologists

**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE  
REGULATORY REVIEW ACT**

I.D. NUMBER: 16A-4711  
SUBJECT: LAND SURVEYORS & GEOLOGISTS – QUALIFICATIONS FOR LICENSURE  
AGENCY: DEPARTMENT OF STATE  
STATE REGISTRATION BOARD FOR PROFESSIONAL ENGINEERS

**TYPE OF REGULATION**

- X Proposed Regulation  
Final Regulation  
Final Regulation with Notice of Proposed Rulemaking Omitted  
120-day Emergency Certification of the Attorney General  
120-day Emergency Certification of the Governor  
Delivery of Tolled Regulation  
a. With Revisions                      b. Without Revisions

**FILING OF REGULATION**

DATE	SIGNATURE	DESIGNATION
		HOUSE COMMITTEE ON PROFESSIONAL LICENSURE
12/15/11	<i>Michele Warren</i>	MAJORITY CHAIRMAN <u>Julie Harhart</u>
12/15/11	<i>Mary Walmer</i>	SENATE COMMITTEE ON CONSUMER PROTECTION & PROFESSIONAL LICENSURE
		MAJORITY CHAIRMAN <u>Robt. M. Tomlinson</u>
12/15/11	<i>K Cooper</i>	INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL (for Final Omitted only)
12-15-11	<i>SM</i>	LEGISLATIVE REFERENCE BUREAU (for Proposed only)